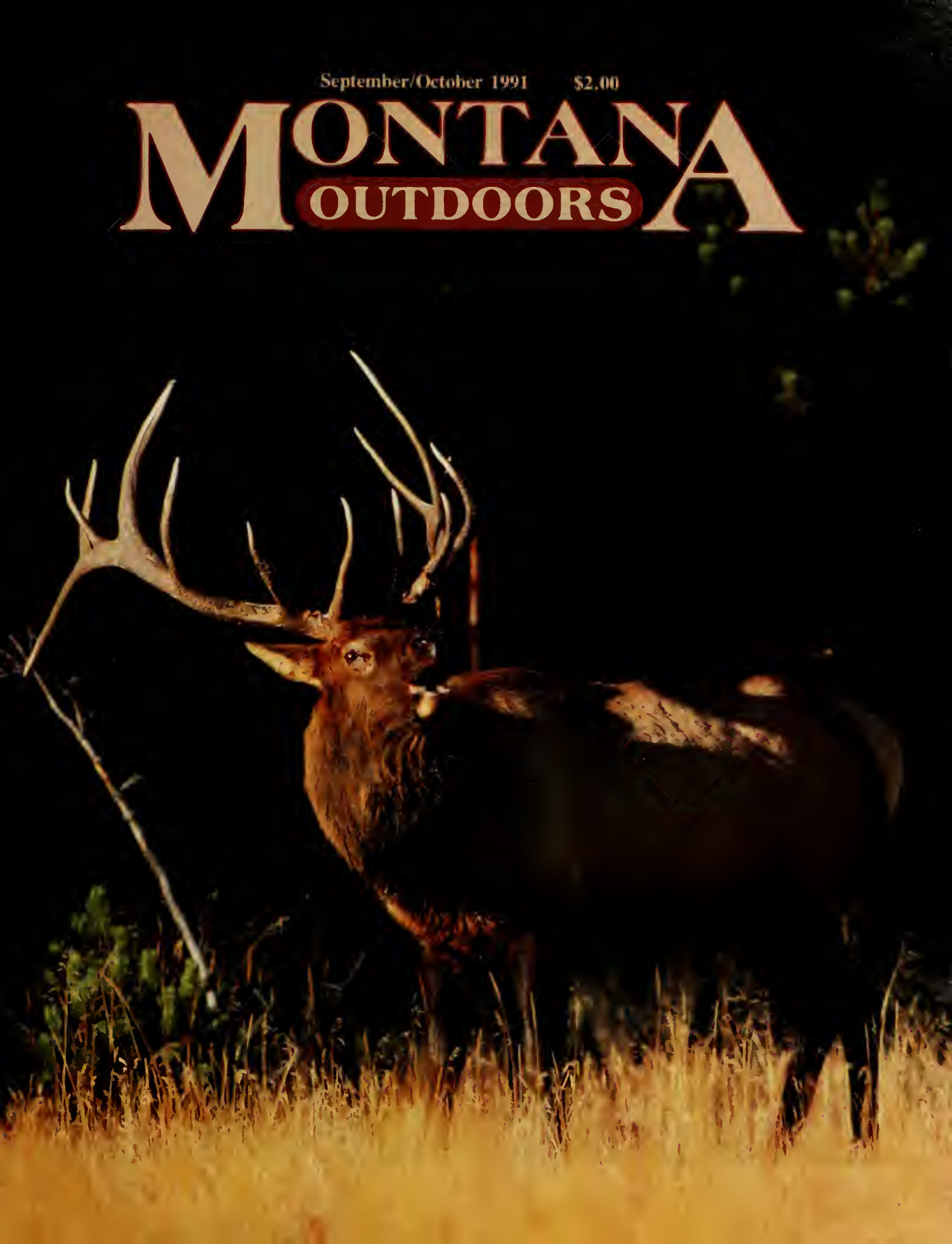
September/October 1991 $2.00

MONTANA OUTDOORS



Our Point of View

TOM WARREN

LAST MARCH, MONTANA'S 1991 LEGISLATURE established the "third week of September as an official week of observance of Montana's hunting heritage." As far as we know, Montana is the first state to proclaim a full week to officially pay tribute to the sport of hunting as an expression of our cultural traditions.

The legislative intent was threefold: (1) to reflect on hunting as an expression of Montana's culture and heritage; (2) to acknowledge the contributions made by sportsmen and sportswomen that have resulted in Montana's diverse wildlife populations; and (3) to celebrate the rich traditions of Montana's hunting heritage.

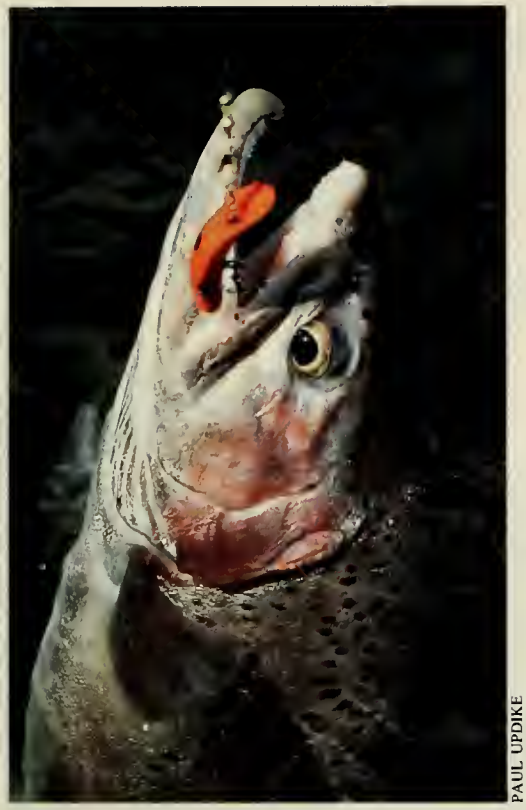
We in Montana are proud of our hunting heritage. We are also proud of the sportsmen and sportswomen who have contributed immeasurable amounts of time and money to conserve not only Montana's wildlife, but also Montana's wildlife habitats.

In recognition of our state's hunting tradition, Montana's first annual Hunting Heritage Week will be celebrated this year from September 15 through September 21.

We're excited about the opportunity Hunting Heritage Week will provide to formally acknowledge the contributions hunters have made to wildlife conservation. For without the concern of Montana's hunters and their honorable efforts to preserve this state's wildlife habitat, we would have no hunting heritage to celebrate.

I have a feeling that years from now a group of enterprising university students may dig through Fish, Wildlife & Parks' archives to discover how it all began. Come to think of it, those future students will probably find everything they need to know in their families' photo albums. For in Montana, the roots of our hunting heritage run as deep as most family trees.

K.L. Cool
Director
Montana Department of Fish, Wildlife & Parks



PAUL UPDIKE

Turn to page 17 for an article on Blackfoot River trout management.

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MONTANA OUTDOORS

September/October 1991
Volume 22, Number 5

FEATURES

2 Watchable Wildlife—"A Sucker Called Blue"
by Chris Hunter, illustration by Gretchen Grayum
Some might call the blue sucker the ultimate fishery oxymoron: a BEAUTIFUL sucker.

6 Lands Legacy—"Shelter from the Storm"
by Bernie Kuntz
Dome Mountain—and its vast sweep of high grasslands so crucial to wintering elk—has become one of the state's most important wildlife management areas.

13 Ekalaka Relativity
by Alan Charles, illustrations by Takehiro Taira, Diane Nugent, and Dan Coughlin
Sport is a relative thing...it grows, changes, and develops, even as a person himself matures.

17 The Blackfoot Challenge
by Don Peters
The trout that endure in the Big Blackfoot owe their grit to the harshness of that water.

22 Beyond Textbooks and Classrooms
story and photos by Jim Keener
Project WILD gears its activities toward instilling a strong environmental ethic in participants.

25 The Great Montana Chicken Ranch
by Tom Hinz
As a "windshield survey" showed, some pretty big areas of Montana have practically no grouse, pheasants, or partridge remaining.

30 Perspectives—"My Horns, My Heads, Her House"
by Wade Fredenberg, illustrations by Dave McGee
It could be argued that a four-foot-high crawl space that doubles as a root cellar might not be an appropriate trophy room.

DEPARTMENTS

9 Catchall
12 Contributors
21 Readers Respond

COVERS

Front Cover—Adjectives describing elk are many: majestic, magnificent, noble, impressive, regal. They all seem to fit **Rodney Schlecht's** front cover subject, which is also the subject of many a fall pursuit.

Back Cover—Montana may be the first state to officially mark its hunting heritage with a week-long event. **Annette Finstad's** back cover poster underscores the week's central message, "Wildlife depends on places where traditions are more than memories. Pass them on." Join other sportsmen and sportswomen in celebrating Montana's first Hunting Heritage Week September 15 through September 21.

A Sucker C

by CHRIS HUNTER,
illustration by GRETCHEN GRAYUM

WE WERE DRIFTING A NET IN THE MISSOURI RIVER near Virgelle. The pallid sturgeon we were looking for had been recently listed as endangered by the U.S. Fish and Wildlife Service and we were collecting information for our recovery efforts on its habitat use and preference. It was a beautiful spring day, with only a chance of afternoon thunderstorms.

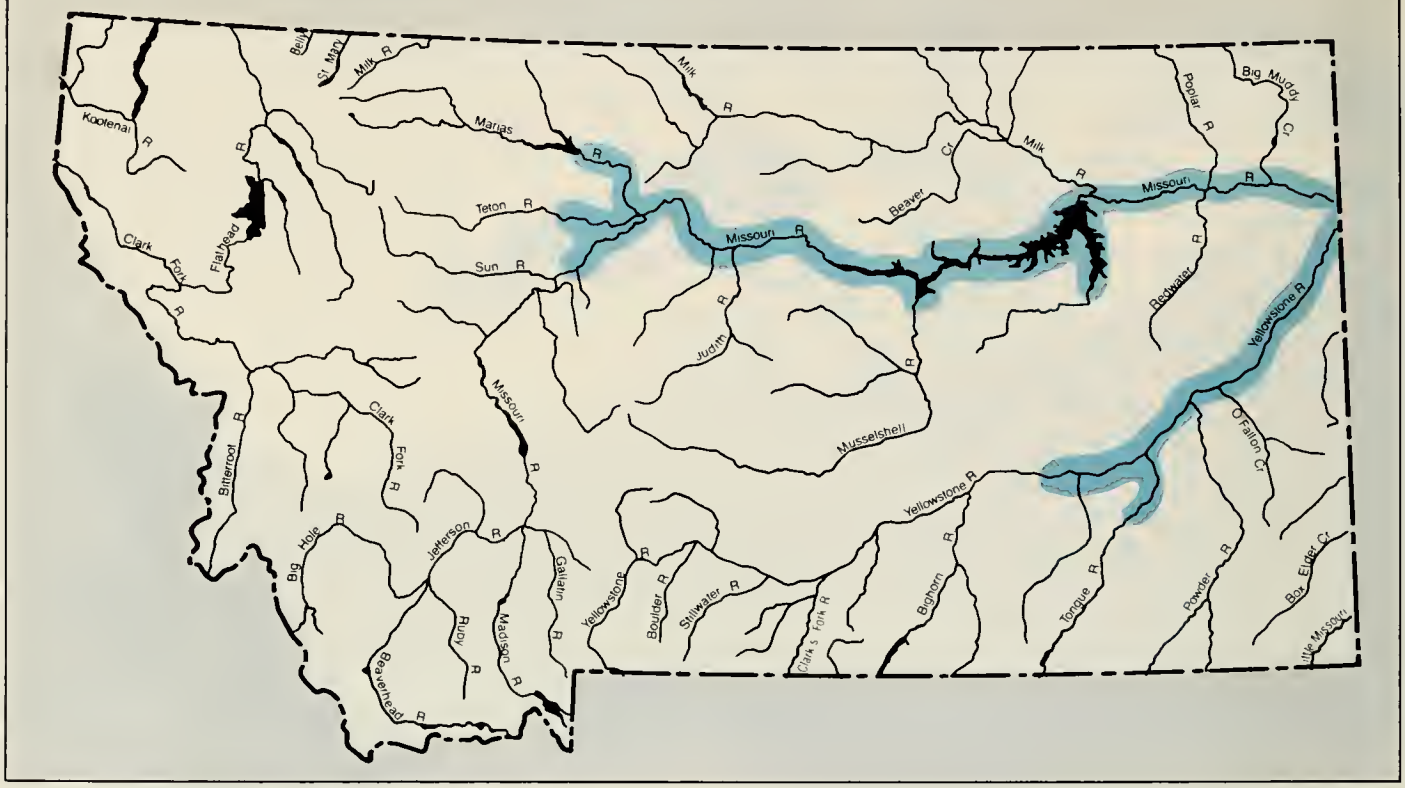
As we kept a sharp eye out for pallids, a long sickle-shaped fin, followed by a dark slate blue back, broke the surface. It was gone in the blink of an eye, but it was still a thrill. No, it wasn't a pallid. It was a blue sucker. But to this group of fisheries biologists, seeing the mysterious and beautiful (yes,

alled Blue

beautiful) sucker was almost as exciting as finding a pallid.

The blue sucker is an uncommon and little known fish inhabiting the major river systems of the United States. It has been reported from the Missouri, Mississippi, Rio Grande, and Ohio rivers and their major tributaries. In the dinner category, the blue sucker is reputedly one of the more tasty freshwater fish, certainly the best tasting of the suckers. It was once commercially important—in 1894 and 1899, the only two years for which information is available, nearly 2 million pounds of blue suckers were caught in a 21-mile section of the Mississippi River bordering the states of Illinois, Iowa, and Missouri. After locks and Dam 19 were constructed at Keokuk, Iowa in 1910, the catch in this reach dropped by two-thirds. The major causes of this decline were the reduction in current velocity below the dam and the loss of a series of rapids that had been prime blue sucker habitat. But

Distribution of the Blue Sucker in Montana



I'm getting ahead of the story.

The blue sucker (*Cycleptus elongatus*) is unique among suckers and is the only species within its genus. The genus, *Cycleptus*, comes from two Greek words: *cyclos* meaning "round," and *leptos* meaning "slender." The genus name refers to the blue sucker's small mouth. The species name, *elongatus*, describes the slender, long shape of the body. The caudal peduncle—the part of the body between the end of the dorsal and anal fins and the caudal fin—is extremely long and inspired one author to write, "So bizarre are the proportions that neither adult nor young can be confused with any other sucker."

The dorsal fin is another distinguishing characteristic. The base of the fin is long, and the first few rays are greatly lengthened while the remaining rays are short. This gives the fin its sharp, sicklelike appearance.

Finally, true to their name, blue suckers *really are blue*. The back is slate blue or dark olive-blue, grading to a whitish blue on the ventral surface. All fins are dark slate blue.

Putting these parts together, the small mouth, long slender body, and unusual coloration yields the ultimate fishery oxymoron: a beautiful sucker.

In spite of its former importance as a commercial food fish, fishery scientists know little about the life history and habitat needs of blue suckers. They are long-lived and can reach incredible size—the largest specimen recorded in Montana was 29-3/4 inches long and weighed almost 11-1/2 pounds. Fish up to 40 inches and 16 pounds have been reported elsewhere.

Most of the research focusing solely on blue suckers has been done in the Midwest. These studies indicate that the heavy-bodied, muscular, slender shape of the blue sucker makes it well suited to life in strong currents. When adults are captured in the field, they are usually found in deep (three to six feet) riffles with high water velocities. Kansas fishery researchers collected adult blue suckers in a riffle with velocities as high as 8.5 feet per second (fps); they captured most adults in currents greater than 3.3 fps. These swift, deep habitats are extremely difficult to sample and this may be part of the reason for the lack of information about blue suckers.

The researchers in Kansas kept juvenile blue suckers in a laboratory stream to find out what kind of bottom type (substrate) and water velocity they preferred. Researchers consistently found juvenile fish in a current of 3 to 4 fps over a smooth substrate. They experimented with substrate ranging from fine gravel to large cobble and bedrock. The key seemed to be whether the bottom was smooth; the blue suckers moved awkwardly over an irregular stream bottom in slower current. Only over smooth substrates in higher currents did they glide over the bottom and make feeding movements.

Kansas researchers placed an adult blue sucker in this same laboratory stream. Even at water velocities greater than 3 to 4 fps, it was able to maintain position with only slight caudal fin movement.

In this same study, fishery researchers captured juvenile blue suckers in the field over large substrates in shallow, swift currents. They collected only a few, but the fish they found were in shallower, slower water than adults.

This information about habitat preferences comes from a single project conducted in Kansas. While it is generally unwise to base conclusions on a single study, this is essentially the only information available on blue sucker natural history. This same study documented blue sucker spawning in spring (April-May). The major spawning site was an area where the river narrowed and flowed over bedrock and cobble-sized (six- to 12-inch) rocks. Velocity was 6 fps (as a point of reference, rainbow trout spawn in the tails of riffles where preferred velocities fall in the range of 1.5 to 3 fps).

As one might expect of a riffle-dwelling fish, the blue sucker diet consists mainly of aquatic insects. Caddis flies and dipterans (houseflies, gnats, deerflies, horseflies, and others) are the chief components, supplemented by fingernail clams and some mayflies. Their diet is similar to that of trout.

MOST OF THE BLUE SUCKER INFORMATION gathered in Montana and other states has been incidental to other investigations, just as our sighting was incidental to a pallid investigation. Department of Fish, Wildlife & Parks biologists collected blue suckers during a study of the Missouri River downstream from Fort Peck Reservoir. Investigators divided this 183-mile reach into eight study sections. The blue sucker was common in six of the eight; it was abundant in the seventh, and occurred in fair numbers, but with limited distribution, in the last reach.

FW&P biologists also conducted a five-year study of the fishery of the Wild and Scenic stretch of the Missouri River (Fort Benton to Fred Robinson Bridge) during the late 1970s. Biologists collected blue suckers at most of the stations.

In addition, one of the researchers, Rod Berg, found a significant spawning run of blue suckers in the lower Teton River on May 13, 1979. He found an average of 40 blue suckers per mile, all ripe males and females. A spawning run was also found in the lower Marias River, but it was smaller than the Teton River run; another spawning run was discovered in the Tongue River in the early 1970s. In 1963, Jim Posewitz documented a blue sucker spawning run at the mouth of the Musselshell River. Blue suckers are also found in the lower Yellowstone.

From 1978-79 in the study on the Wild and Scenic Missouri, biologists sampled 214 blue suckers. These fish ranged in age from 6-17 years, and over 70% of the sampled fish were 11 years old or older. The reader will recall that in the Kansas study, few juvenile fish were collected. One paper I reviewed stated that the collection of only one larval (recently hatched) blue sucker has been reported in the literature. One tongue-in-cheek explanation for the apparent lack of juvenile blue suckers and relative common collection of adults is that when carp become 7 years old they turn into blue suckers.

In 1990, the American Fisheries Society (AFS) listed the blue sucker as a Species of Special Concern throughout its range, including Montana. Extensive changes in big-river habitat in the Missouri River over the past 50 years inspired the listing. The blue sucker is not considered a Species of Special Concern by the Montana Chapter of AFS or the Department of Fish, Wildlife & Parks.

THE DAMS ALONG THE MISSOURI RIVER have greatly changed the habitat conditions under which the pallid sturgeon, paddlefish, blue sucker, and other native species evolved. As noted in the opening of this article, the construction of locks and dams has eliminated the riffle habitat used by blue suckers and resulted in population declines. Habitat changes are believed to be largely responsible for the decline of pallids; such changes probably affected other species that evolved with the pallid. This is particularly true of species such as the blue sucker which make long spawning runs. In most of the Missouri River system, long spawning runs are impossible because of dams.

Studies on the Missouri River in Montana have revealed that the blue sucker is common in the long, unobstructed river reaches from Fort Benton to Fort Peck Reservoir and from Fort Peck Dam to the Montana/North Dakota border. We already noted that researchers collected few juvenile blue suckers, which could indicate that suckers are not reproducing successfully. However, the lack of documented reproduction is not recent. Juvenile blue suckers have never been found with regularity and yet the populations continue to exist. Another theory is that few juvenile blue suckers are collected because their habitats are not sampled in the course of normal game fish surveys. Researchers have also found that in some sucker species an abundance of adults somehow inhibits recruitment of young suckers. This could be true of blue suckers.

At this point, fisheries biologists simply do not understand enough about the biology of blue suckers to know why young fish are seldom collected. We take heart in the fact that Montana has two long stretches of relatively unaltered Missouri River, as well as the lower Yellowstone, suitable for blue suckers and that adult fish are common in these rivers. Maintenance of the habitat is critical to the blue sucker, pallid sturgeon, paddlefish, and other native species that evolved in the big-river habitat of the Missouri and Yellowstone rivers.

The blue sucker epitomizes a significant challenge facing fish and wildlife agencies. Previous articles in this "Watchable Wildlife" series have discussed some of the difficulties in obtaining funding and staff necessary to understand and protect populations of nongame species. As difficult as this may be, individuals and organizations exist that will champion the cause of a nongame species such as the bluebird. But who will champion the cause of the blue sucker, a species no less native, no less distinct, and no less blue than the bluebird, but considerably less visible and appealing. The importance of biodiversity and maintaining our complement of native species does not end at the water's edge. But meeting the needs of native species like the blue sucker will be both extremely challenging and increasingly important. ■

MIKE LOGAN

Dome Mountain Wildlife Management Area

SHELTER *from the* STORM

by BERNIE KUNTZ

FOR THOUSANDS OF YEARS, elk have wintered on the giant shoulder of a mountain where strong winds blow the snow away. Here, the wapiti feed on last summer's grass. The elk migrate from the east, from the high country that is now the Absaroka-Beartooth Wilderness Area, and from the south, from what we know as Yellowstone National Park. In December, one can still see the elk strung out in columns during their annual migration to winter range.

An enormous timbered hogback

BERNIE KUNTZ

In recent years, 50% to 60% of all elk migrating out of Yellowstone National Park have wintered on the 4,680-acre Dome Mountain Wildlife Management Area.

above the winter range has been named Dome Mountain, and it is visible from the banks of the Yellowstone River in the Paradise Valley. But it is the foothill country of Dome Mountain—the vast sweep of high grasslands so crucial to wintering elk—that has become one of the state's most important wildlife management areas.

Since 1914 much of the winter range at Dome Mountain fell within the properties of Frank Rigler and the Allen Nelson family. The elk still came to the windswept ridges, but they were forced to compete with cattle for forage. Then in 1986, the Department of Fish, Wildlife & Parks (FW&P) bought the first Dome Mountain acquisition of 2,600 acres from Frank Rigler, and the project took off. Two years later, following a massive elk winterkill, the Rocky Mountain Elk Foundation (RMEF), a private sportsmen's group based in Missoula, spearheaded a cooperative federal and state effort to acquire adjacent private property for elk winter range.

Consequently, FW&P acquired the Nelson property of 2,080 acres, creating the Dome Mountain Wildlife Management Area (WMA) which presently encompasses 4,680 acres. Also involved in the complex purchase were the U.S. Forest Service (USFS) and National Park Service. (In the proceedings, the USFS acquired 1,094 acres of the Nelson property, in addition to the 3,265 acres of the historic OTO Ranch which lies south of Dome Mountain. Today, both USFS acquisitions are being managed as elk winter range.)

The Dome Mountain WMA has become increasingly important to the northern Yellowstone elk herd. In the 1970s and early '80s, fewer than 500 elk wintered there. "In recent years, 50% to 60% of all elk that migrate out of the park utilize the WMA," said Tom Lemke, area wildlife biologist from Livingston. "That can mean 2,000 to 3,000 head of elk in some years."

Winter range outside the park comprises only 17% of the total northern herd's winter range, but may support more than 50% of the elk herd during severe winters. "High quality winter range, like that found on the Dome Mountain WMA, is absolutely critical to the long-term welfare of this nationally recognized elk herd," Lemke said.

ONE OF THE GOALS of FW&P is to preserve a regular elk migration to the Dome Mountain wintering area, which will be accomplished by managing native vegetation and carefully regulating the elk harvest.

Natural winterkill is a major mortality factor for Yellowstone elk; however, winterkill decreases the farther north one journeys from the park. For example, during the hard winter of 1989, which followed the Yellowstone fires in summer 1988, elk mortality outside the park was highest near the park boundary. It decreased to only a few dead elk in drainages outside the park near Dome Mountain and Dailey Lake, on the Dome Mountain WMA.

Dome Mountain WMA is kept open for public hunting throughout the general and late seasons to obtain a harvest on late-migrating elk. However, motorized vehicles cannot be used off established roads or trails, and some areas of the Dome Mountain WMA are off limits to all vehicles. Parking areas are located at three sites.

Weather patterns and snow conditions determine when the WMA is used by

elk, but generally it is occupied from about December 1 through late April by up to 2,000 to 3,000 elk. The WMA is closed Feb. 20 to May 15 to prevent disturbance of wintering elk. "That builds in security and solitude for wintering elk," says Region Three (Bozeman) Wildlife Area Manager Fred King. "Elk are even calving on the wildlife management area now," he said, "and we hope to see that increase as time goes on."

Dome Mountain WMA also provides winter range for about 200 mule deer which, like the elk, can be viewed from the portion of the WMA that borders Dailey Lake. Other wildlife can be observed at Dome Mountain, including a variety of raptors, waterfowl, and nongame birds. Recently, bluebird boxes have been installed. Also, FW&P and a private organization called The Peregrine Fund established a "hack site" on the WMA for releasing young peregrine falcons into the wild. Twenty-one falcons have been released, and adults have returned to the Paradise Valley. The return of nesting peregrines appears likely in the near future.

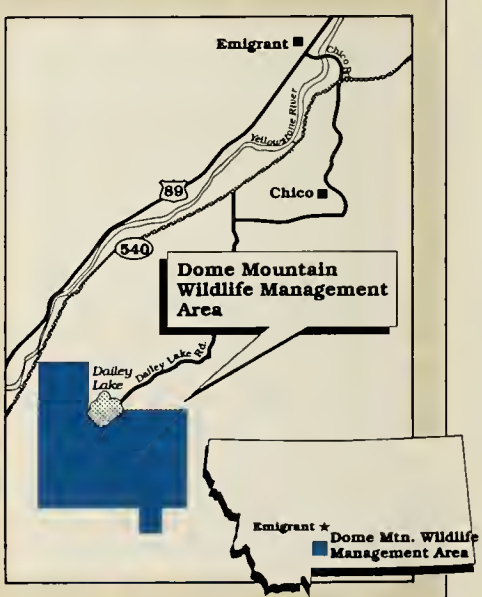
King explains that Montana's WMAs represent a tremendous opportunity for the long-term stewardship of wildlife: "The department can make use of a renewable resource by providing hunting opportunities, then take the money generated from wildlife and reinvest it back into the habitat required to keep the animals alive. That kind of system can go on forever, as long as we maintain the hunting tradition in Montana. One would be hard-pressed to say that it is unsuccessful."■

TOM WARREN

The primary goal of Dome Mountain WMA is to provide critical winter range for the northern Yellowstone elk herd.

DOME MOUNTAIN WILDLIFE MANAGEMENT AREA

Location: Park County, about 30 miles south of Livingston in the Paradise Valley.
Size: 4,680 acres.
Access: Take U.S. 89 south 21 miles from Livingston. At Emigrant, take the Chico road for about one mile, then turn onto old Highway 540 and proceed south for about three miles. Take the Dailey Lake road for eight miles for access to Dome Mountain WMA.
Management goal: To maintain the quality and quantity of vegetation in an improving condition on historic elk winter range.
Hunting opportunities: Seasonal opportunities to hunt elk and mule deer. WMA offers access to adjacent Absaroka-Beartooth Wilderness Area.
Wildlife viewing: Year-round bird-watching and wildlife photography opportunities. Elk and mule deer can be viewed on portions of the WMA visible from Dailey Lake. Eagles, hawks, loons, swans, and a variety of ducks can be seen on the game range.
Other recreation: Dailey Lake is a popular windsurfing and fishing area. The lake supports rainbow trout, yellow perch, and walleyes. The area also offers excellent hiking and horseback riding opportunities. Dailey Lake has a large no-fee, no-reservations campground for overnight use.



DECOY PROGRAM: UP AND RUNNING

Life is going to get tougher for individuals shooting at game out of season or after legal hunting hours, shooting from roads or from a vehicle, or committing other wildlife-related violations of Montana law.

A new provision in Montana's hunting statutes makes it illegal to shoot at, or attempt to shoot at, wildlife decoys or other facsimiles of deer, elk, and other wildlife used by the Department of Fish, Wildlife & Parks for enforcement purposes. Enactment of this law, which was passed by the 1991 Legislature and took effect July 1, gives state game wardens an important new means to prevent poachers from stealing wildlife from the public. The new decoy program also provides wardens with an avenue for responding to recurring landowner concerns about shooting before or after legal hunting hours, shooting near buildings, and hunting without permission.

Although decoys have been used to deter poachers in other states for several years, Montana law, before passage of Senate Bill 291, did not include a provision that makes it illegal to shoot at facsimiles of wildlife. Many other states still have not enacted a similar law and the absence of such a provision has sometimes hampered prosecution of those who, by all outward appearances, were intent on illegally taking wildlife. FW&P officials hope the new law will not only help curtail illegal activities, but also increase the agency's effectiveness in apprehending and bringing those who commit violations to justice.

The penalty for attempting to take a wildlife decoy is the same as prescribed for unlawfully taking the wildlife species simulated. As such, those caught shooting at, or attempting to shoot at, a decoy face sizable fines and possible loss of hunting privileges.

Yet, the real value of any decoy program lies in its deterrent effect and the fact that valuable wildlife resources do not have to be compromised for those who break the law to be prosecuted. Department officials hope that by informing the public of the existence of the decoy enforcement program, many would-be poachers will reconsider the wisdom of their ways.

Who knows? Those telltale eyes staring spellbound into the glare of a poacher's spotlight may be the real thing, or they may have been manufactured in Cleveland.—*William Phippen, information officer, Conservation Education Division, Helena*

WATCHABLE WILDLIFE CONFERENCE COMING TO MONTANA

Montana has been selected to host the first national watchable wildlife conference, slated September 10-12, 1992, in Missoula. Deborah Richie, Department of Fish, Wildlife & Parks watchable wildlife specialist, said, "We're estimating from 300 to 500 people will gather to discuss the future of wildlife viewing across the country."

The conference will explore how public and private sectors can work together to build watchable wildlife programs that will both conserve wildlife and help to diversify rural and urban economies through wildlife viewing.

FW&P is taking an active role by assisting with the agenda and field trips. The conference is the brainchild of a consortium of federal land-managing agencies, conservation groups, and private business.

Richie said, "We anticipate national coverage and attendance by important policy makers. The conference will target private tour operators, outfitters, resort owners, chamber of commerce representatives, and state tourism division staff. Wildlife and interpretive specialists will help train the private sector and present conservation education messages that are critical to watchable wildlife programs, such as the importance of biological diversity and ethical wildlife viewing."

For more information, contact Richie at the Department of Fish, Wildlife & Parks, 1420 East Sixth Avenue; Helena, MT 59620 (406/444-1276).

DEPARTMENT EMPLOYEES ACCLAIMED

————K.L. Cool—Director of the Year————

Department of Fish, Wildlife & Parks Director K.L. Cool was named Director of the Year by the Law Enforcement Technical Committee of the Western Association of Fish and Wildlife Agencies. Cool received the award at the association's annual convention in Edmonton, Alberta.

In presenting the award, Bob Adams, director of Enforcement Services for the Fish and Wildlife Division of the Alberta Department of Forestry, Lands, and Wildlife, noted Cool's past experience as a state game warden in South Dakota, his tireless efforts to secure long-needed law enforcement legislation in Montana after becoming FW&P's director in 1989, and his immediate support of the department's covert enforcement operations.

"His philosophy is to get tough with the serious violator," Adams said, while reducing unintentional violations through optimum education efforts. "The public acceptance of this philosophy has been widespread," he said, "and support of department enforcement programs is at an all-time high."

Cool's philosophy, Adams continued, has been well received by enforcement personnel and all feel they are part of a winning team. "His ability to recognize and show appreciation for accomplishments," Adams said, "has brought a very positive reaction."

Although he has been director for a short time, Adams noted, Cool's "positive influence not only on the department's Enforcement Division, but also on the entire department, has been significant."

The Western Association of Fish and Wildlife Agencies comprises the fish and wildlife management agencies of the western states and Canadian provinces.

——Jerry Gallagher—Distinguished Service Award——

Jerry Gallagher, manager of the Warm Springs Wildlife Management Area, was awarded the Distinguished Service Award by the Montana Chapter of The Wildlife Society.

The society recognized Gallagher's 20-year commitment to

BILL THOMAS

Warm Springs Wildlife Management Area Manager Jerry Gallagher with his Distinguished Service Award from the Montana Chapter of The Wildlife Society.

wildlife in the Warm Springs area. He has worked closely with Ducks Unlimited to develop numerous waterfowl ponds and was instrumental in developing a grazing system with an adjacent landowner for improved nesting habitat. Gallagher also works with the Anaconda Job Corps developing waterfowl ponds on the wildlife management area.

He works with the Environmental Protection Agency, ARCO, and other state and federal agencies involved in the Warm Springs Ponds Superfund Site clean-up project at the headwaters of the Clark Fork River. His efforts were recently recognized by the Fisheries Division of FW&P for collecting water samples and information during a flash flood and fish kill in the river.

Gallagher also conducts tours of the Warm Springs Wildlife Management Area to educate people about the area's wildlife and its management.—*John Firebaugh, Region Two (Missoula) wildlife manager*

———Marc Glines—Wildlife Officer of the Year———

Marc Glines, a FW&P game warden based in Ennis, received the prestigious 1990 Shikar-Safari International Wildlife Officer of the Year Award for Montana.

Glines, a five-year veteran of the department's Enforcement Division, began his career in the Miles City region and worked as the Sidney district warden before being transferred to Ennis in 1989.

The Shikar-Safari award winner is selected by the FW&P director from nominations submitted by wardens in each of the department's eight administrative regions. Winners are selected on the basis of their professional relationship with sportsmen and landowners in their region, performance and dedication to duty, and their participation in activities outside their enforcement work.

Hyland Erickson (right), representative of Shikar-Safari International, presents FW&P warden Marc Glines with the 1990 Wildlife Officer of the Year Award for Montana. Looking on are FW&P Director K.L. Cool (far left) and Errol Galt, chairman of the Montana Fish, Wildlife & Parks Commission.

Glines was recognized for being a thorough investigator whose efforts led to the conviction of those involved in an illegal moose poaching operation outside Yellowstone National Park, as well as for his involvement in activities in Ennis and surrounding communities. "By making an effort to become active in local affairs," said Director K.L. Cool in his letter nominating Glines for the award, "Marc has become more than just the Ennis game warden; he has become a respected member of the community."

The Shikar-Safari International award, presented annually by the club to one wildlife enforcement officer in each state, has been presented to a Montana game warden each year since 1969.

———Dennis Workman—President's Award———

Dennis Workman, FW&P's fisheries manager for Region Two (Missoula), received the Clark Fork Coalition's President's Award at the group's annual convention.

A board member for the coalition since it began seven years ago, Workman was cited by President Tim Williamson for "being right in the thick of more of our ventures than we can count." The coalition works to protect the outstanding waters of the Clark Fork River/Lake Pend Oreille watershed.

THE HUNTER'S ALLIANCE SETS UP SHOP

There's a new organization to focus efforts of hunters and hunter groups at the grassroots level. The group's Executive Director Dale Burk, Stevensville, said The Hunter's Alliance, Ltd., has already begun its pro-hunting efforts. The Montana-based group will work nationally to apprise the American public of the role hunters have played, and continue to play, in the conservation of the country's wildlife and their habitat.

"Contrary to the notion that a small segment of anti-hunting zealots have tried to push—in Montana and elsewhere, on the basis of misguided emotion and worse information—no single element of the American public has contributed more to the well-being of wildlife and our natural resource habitat base than hunters,"Burk said. "It is past time for those in the hunting community to speak out. Examination of our nation's conservation history alone shows that hunters have no reason to be defensive about their sport or its role in contemporary

society. Many wildlife species wouldn't be here in great numbers today if conservation-oriented hunters hadn't worked to preserve them."

Formal kick-off for the group was August 13 at a Hunting Congress in Helena; Governor Stan Stephens and *Outdoor Life* Hunting Editor Jim Zumbo were featured speakers. A 10-city Montana tour followed, with the goal of raising funds and attracting members statewide.

Burk emphasized that The Hunter's Alliance sees itself as a lead "advocacy" organization on hunting-related issues and a support group to existing hunting and wildlife groups. As an example, the alliance will conduct seminars in developing media and political skills for use at the local level. "More and more, we're finding that local citizens are the critical players in promoting, defining, or defending the role of hunting today," Burk said. "In a society where communication skills are vital, we feel a need to step in and offer assistance to those individuals and groups wanting to contribute to the pro-hunting effort."

If you're interested in joining or working with The Hunter's Alliance, contact Burk at 205 Main Street; Stevensville, MT 59870 (406/777-2521). Annual membership costs $15 for individuals; other membership categories are available for businesses, sportsman/conservation organizations, and outfitters.

MOCKINGBIRDS IN MONTANA?

Where in Montana can you find great gray owls in the winter? Have mockingbirds ever been spotted in Montana? The answers to these questions can be found in P.D. Skaar's "Montana Bird Distribution," last published by the Nongame Wildlife Program in 1985. And now, the fourth edition, awaited by birders and wildlife managers, is on the way. Target date for publication is the end of the year.

The nongame program joined forces with the Montana Natural Heritage Program and Montana Audubon Council to take on this massive project. For the first time, listings of 381 bird species will be housed in a permanent computer data bank at the heritage program. Dwight Bergeron, a Helena wildlife biologist, has been hired by the three groups to work on the project. Among other duties, he'll enter the many pages of bird observations sent in from all corners of Montana.

In addition, a permanent bird verification committee conducted its first meeting in July. The committee comprises nine expert birders from different parts of Montana who have volunteered their time. Members include: Chuck Carlson, chairman, Fort Peck; Phil Wright, Missoula; Bob Eng, Bozeman; Harriet Marble, Chester; Terry McEneaney, Yellowstone National Park; Helen Carlson and Bebe Fitzgerald, Billings; Dan Casey, Kalispell; and Fritz Prellwitz, Malta.

The computer data bank and upcoming book will significantly improve knowledge of birds in Montana. This knowledge will help to ensure conservation of birds and their habitats, not only in the state but internationally, since about 200 of Montana's bird species migrate south, some as far as South America.—*Deborah Richie, watchable wildlife specialist, Conservation Education Division, Helena*

COOPERATION SPELLS SUCCESS

The Montana Department of Fish, Wildlife & Parks, landowners, sportsmen, and Broadwater County outfitters and guides joined in a cooperative effort to solve a problem, provide public hunting, and offer donated services.

The problem was the reduction of the wintering elk herd which had climbed to an estimated total of 650 animals in the west half of Hunting District 390 in Broadwater County. The majority of these elk spend the summer and fall farther east on private and public lands, then move to their traditional winter range. With the onset of snow last winter, FW&P officials, spearheaded by the efforts of area biologist Tom Carlsen, met with area landowners, and they decided on a goal of 450 wintering elk.

Landowners in the hunting district agreed to open their lands to public hunting.

Broadwater County outfitters and guides offered to donate free retrieval services for any sportsman who requested help. The Montana Outfitter and Guides Association furnished coffee for workers and hunters. Some of the landowners provided free guiding services to aid hunters in getting to the areas where elk were concentrating. Landowner George Dundas donated many hours of time helping direct hunters into the area and aiding in animal retrieval. Turner Ranches provided two guides, Brad Cameron and Rob Arndt, who also helped retrieve a number of elk.

Results of the cooperative efforts of the diverse groups are commendable. Over four weekends, 166 elk were checked and officials estimate the actual harvest at 200 elk. Carlsen, Russ Alm, Jim Bird, and other FW&P employees provided excellent technical help for the entire hunt. The 15 representatives from the Broadwater County-based outfitters and guides—among them Henry Barron, Ron Cheevers, Bill Davis, Kelly Flynn, Gary Flynn, Ted Flynn, Mike Parsons, Monte Schnur, and Ed Watson—retrieved 23 elk for sportsmen.

Outfitter spokesman Kelly Flynn called the entire cooperative effort a success and hoped it would spark other efforts by outfitters to improve their public image to sportsmen throughout Montana.

FW&P, landowners, sportsmen, and outfitters and guides should be commended for the tremendous effort involved in making the late hunt in the west half of Hunting District 390 very successful.—*Broadwater County outfitters and guides*

FOR SALE: BACK COVER POSTER

Montana's 1991 Legislature established the "third week of September as an official week of observance of Montana's hunting heritage." To commemorate the event, the Department of Fish, Wildlife & Parks, in cooperation with the Rocky Mountain Elk Foundation and Montana photographer Bill McRae, produced the poster that appears on the back cover of this issue of *Montana Outdoors*.

Copies of the 20- by 30-inch poster are available for $5 from all FW&P regional offices, the Helena headquarters, or by mail order ($5 plus $2 postage and handling) from the Rocky Mountain Elk Foundation, Attention: Hunting Heritage Week poster, P.O. Box 8249; Missoula, MT 59807-8249.

CONTRIBUTORS

• It's a sucker. It's long, it's blue, and it's the ultimate fishery oxymoron: a BEAUTIFUL sucker. To learn more about "A Fish Called Blue," turn to page 2. Writer **Chris Hunter** poses an intriguing question for readers: "...who will champion the cause of the blue sucker, a species no less native, no less distinct, and no less blue than the bluebird?" Hunter is special projects bureau chief in the department's Fisheries Division in Helena.

Illustration for the blue sucker article was especially prepared by Helena artist **Gretchen Grayum**. Of her work, Grayum says, "My focus on fish and insects reflects my love of Montana rivers and creeks and all that thrives there." She is writing and illustrating a children's book about a trout, "Rainbow, the Trout Who Never Got Caught."

• "For thousands of years," **Bernie Kuntz** writes "elk have wintered on the giant shoulder of a mountain where strong winds blow the snow away." An enormous timbered hogback above the winter range has been named Dome Mountain and it is this wildlife management area that offers "Shelter from the Storm." Kuntz describes this "Lands Legacy" as one of the state's most important wildlife management areas, with its vast sweep of high grasslands so crucial to wintering elk. Turn to page 6 for a look at a spot that offers elk and mule deer hunting, year-round birdwatching, and wildlife photography opportunities. Kuntz is the department's information officer in Region Three (Bozeman).

• The final leg of a three-week hunting trip that had become an annual event for three friends. Deer moving onto the moonlit prairie. Wild turkeys clucking in the distance. A tough climb in predawn darkness, up through pines and broken rock to wait for a buck. And some hunting philosophy passed from father to son: "Each man gets something different from his hunting or fishing...sport is a relative thing...it is a personal happening...that grows and changes and develops." Such are the components of "Ekalaka Relativity." We suspect you'll find **Alan Charles'** words an eloquent way to begin your fall hunting experiences. Turn to his article on page 13. Charles lives in the Pine Hills area east of Miles City with his Chesapeake retriever Widgeon, three colts, an old saddle horse, and 50 chickens; he is former editor of *Texas Sportsman* and *Gulf Coast Fisherman* and previously wrote a syndicated newspaper column, "Sportsman's Notes."

Illustrations for "Ekalaka Relativity" were prepared by **Takehiro Taira**, **Diane Nugent**, and **Dan Coughlin**. *Montana Outdoors'* readers will be pleased to once again see the finely detailed work of Takehiro in our pages; his mule deer pen and ink leads off the article. He continues to work from his studio at 108 West Cottonwood Drive; Kalispell, MT 59901. Nugent recently moved from Butte to Boise where she is continuing to do illustrations, watercolors, and portraits. She free-lances from her studio at 4381 South Cochees Way; Boise, Idaho 83709. Coughlin, a sixth grade teacher in the Helena school system, uses pen and ink, oils, and acrylics as his primary media. His work was recently featured in a show at Baer's Den, Helena; for more information, write him at 4680 Last Straw Drive; Helena, MT 59601.

• Norman Maclean told the Blackfoot River's story in his much-lauded book, "A River Runs Through It and Other Stories." He wrote, "It is a tough place for a trout to live—the river roars and the water is too fast to let algae grow on the rocks for feed, so there is no fat on the fish." And, "It isn't the biggest river we fished, but it is the most powerful, and per pound, so are its fish." The two Maclean quotes are **Don Peters'** opening for "The Blackfoot Challenge." He traces the area's geology and explains some of the reasons the fish have such a rough go. But he is also optimistic that Big Blackfoot anglers will see significant improvements. Turn to page 17 for his article. Peters is a fisheries biologist, working for the department in Missoula.

• **Jim Keener** describes just one project, but it's the sort of activity that makes you want to sign up for Project WILD. The program's activities stretch far "Beyond Textbooks and Classrooms." Project WILD's objective is to help children "learn how to think, rather than what to think, about the critical value-sensitive issues involving wildlife and the environment." Keener recently finished an internship at *Montana Outdoors*. He completed his degree in English from the University of Montana in June.

• "The Great Montana Chicken Ranch" is about the wild kind of chicken that can take on the cruel Montana winter and make it through. But these wild chickens might be in trouble in some parts of Montana. The department's Central Flyway waterfowl biologist for several years, **Tom Hinz** did a "windshield survey" to evaluate bird cover; he determined only about 11% of the area provided good winter habitat. But a new program offers hope, and Hinz calls it "the most significant habitat initiative ever enacted in the state for restoration of upland bird populations and their habitat." Hinz is chief of the small game bureau in the department's Wildlife Division in Helena.

• **Wade Fredenberg's** spouse and housesmate doesn't agree with his "Perspectives" on horns, hides, heads, and hooves." He's fond of the trophies and considers them "wholesome artifacts." She considers them "filthy, moth-eaten dead animal parts that have no place in a civilized society, let alone in my house!" Turn to "My Horns, My Heads, Her House" on page 30. Fredenberg is a fisheries biologist, working out of the Bozeman headquarters.

Dave McGee's imaginative and humorous illustrations are a match for Fredenberg's humor. McGee's work also amplifies our call for material for the 1992 photo issue. McGee works as a structural draftsman for an engineering consultant; his art, photography, and recent experimentations with scratchboard are accomplished from his home studio: 4004 Fifth Avenue North; Great Falls, MT 59401.

• *MO* thanks the following photographers for their contributions to this issue: **Mike Logan**, Helena; **Greg Risdahl**, Broadus; **Rodney Schlecht**, Great Falls; **Paul Updike**, Townsend; and **George Wuerthner**, Livingston. Thanks also to the following contributors who work for the department: **Bernie Kuntz**, Bozeman; **Bill Thomas**, Missoula; and **Tom Warren**, Helena.■

Ekalaka Relativity

by ALAN CHARLES
illustrations by TAKEHIRO TAIRA,
DIANE NUGENT, AND DAN COUGHLIN

AS I CLAWED MY WAY up the eastern Montana slope peering through the moon-shadows and stopping often to catch my breath, I didn't know that my father had died that same morning at his home in the Kentucky hills. I knew only that it was because of him, because of the way he'd raised me, that I was determined to take my buck up high in the rimrock, rather than potting it down on the flats on this opening day of deer season.

"...I kept thinking of a certain rimrock high on one of the ridges...."

This was the final leg of a three-week hunting trip that had become an annual event for my friends Monty and Jack and me. Three weeks of North Dakota wheat fields and grassy uplands, of frost-withered cattails and ice-blue lakes, where we'd hunker in the mornings for mallards, honkers, and sandhill cranes, where we'd spend the afternoons roaming for sharptails, Huns, ruffed grouse, or pheasants, where evenings sometimes found us bellied up to a small town bar or cafe, but just as often we'd camp beside a flickering fire and cook game suppers over the Coleman stove.

This year, we'd decided to top off the upland game bird and waterfowl safari with a short big game hunt in southeastern Montana. We drew deer tags for the area south of a dot on the map called Ekalaka, and so it was that the last week of October, two days before the season opener, the three of us found ourselves scouting the draws and coulees of Montana's eastern prairie.

At the base of some pine-covered chalk bluffs, we met

"And I don't know about such things, but my guess is, my old man was up there with me that morning, looking out over the great sweep of the land, listening to the wind come up with the dawn, looking down through the pines and picking out his own buck, or maybe just watching, waiting."

old-time rancher Joe Kortum, who was more than eager to have hunters reduce the hordes of whitetails and mule deer that were laying waste to his alfalfa stacks. To top it off, as we talked with Joe in his front yard, we could hear two groups of wild turkeys clucking in the pines above the house.

After dark, we watched literally hundreds of deer moving out onto the moonlit prairie. At dawn the next morning, we watched those same deer work back into the hills, bucks and does together, muleys and whitetails both, some passing mere yards from the truck.

So getting a deer wasn't a problem, especially since we had six deer tags between us. And while eastern Montana is not always touted as trophy country, we did see some fine bucks, including one magnificent six-point whitetail that made us wish the season were already open.

As we roamed the ridges the day before the season, we saw deer everywhere, and got a good feel for where the main movements were. That evening, Jack and Monty elected to stake out spots along the lower levels so they could drop their deer close to easy access, while I kept thinking of a certain rimrock high on one of the ridges, with its overlook of 30 miles of prairie and the maze of deer trails winding up under it and passing through a saddle.

WHY UP THERE? Why a tough climb in predawn darkness, clambering up through the pines and broken rock to wait for a buck, the same buck that would be passing through those same lower meadows watched by my friends and that, if it did indeed fall to my shot up on the ridge, would be much harder to get back down to the truck? What difference did it make?

I don't know the answer to that question, not all of it, no more, perhaps, than does any man. But I know part of it; I know the part of it my father tried to explain to me many years ago as I first started hunting on my own.

Although as a lad I'd been raised in the Northwest, first in western Montana and later in Alaska, by the time I reached the age where I could carry a loaded gun unsupervised, we'd moved to the cornfield country of Iowa, and my father seemed somehow to have lost interest in hunting and fishing, although he had avidly pursued both before.

I was bitter, no doubt about it. My older brothers had gotten in on the big country hunting, but the closest I'd come was tagging behind in Montana, struggling to carry the gray-breasted mallards or gaudy ringnecks my father shot, or later, in Alaska, helping him tug the hides from the caribou and moose that hung each year in our garage.

But why, I wanted to know, why didn't he hunt now? Why didn't he go with me to hunt the pheasants or quail in the farmers' fields, or jump the ponds for ducks, or draw for the shotgun tags for the two-day deer season?

He tried to explain it to me one evening, the two of us sitting in his study surrounded by shelves of well-worn books, me settled on the tattered black bear rug that our gray-muzzled golden retriever had chewed on as a puppy, him leaning back in his comfortable leather chair beneath the horns of his first Alaskan moose.

"Each man gets something different from his hunting or fishing," he told me. "Sport is a relative thing, not regulated, not static, not ever the same. It is a personal happening, something that grows and changes and develops even as a person himself matures."

He reached over and opened the ancient locker that had so many treasures in it, the cans of oil and smooth whetstones, the fly reels in their cases and the sheepskin fly books, the duck calls and dog whistles, and best of all, the logbooks he'd kept over the years as he hunted and fished the Northwest.

For a rich two hours, he shared those memories with me, the hours on the Blackfoot and Rock Creek, the Clark Fork and the Madison, and he took me with him up onto the Flathead prairies to wait for the first flight of northern mallards, and back into the mountains for ruffs and blue grouse, and later, into the canyons for deer and elk. I went along as he searched out new country in Alaska, and shared the wonder that frontier had held for him, him a kid from the Pennsylvania coal country whose own father had never hunted, him a man who taught Shakespeare and who discovered the solitude of the western mountains and the companionship of the men who haunted them.

"Sport is a relative thing," he told me again when we'd reached the last page of his logbooks and he'd tucked the mallard curls and grouse fans back between the covers. "After days like these, I personally don't derive much pleasure, much sport if you will, from walking through a farmer's yard to kill a quail in his pig lot, or clambering over fence after fence to reach a two-acre patch of deer woods where I have to look close to make sure no cows are between me and a buck. Don't misunderstand me. I'm not belittling these things. It's just that, for me, personally, the essential ingredients aren't there. I've tried to teach you what I know, and tried to open the door for

you. Now it's up to you. It's all new to you, and I can share it with you through your eyes, through your doing it and telling me about it. But for me to go out and kill a deer or a quail now is no longer important."

OVER THE NEXT 15 YEARS, I went on to hunt and fish quite avidly, being lucky enough to combine an outdoor writing career with that of a charter business in Texas. I traveled throughout the country, and slipped into Canada or Mexico whenever I could, and I got exposed to the great wealth of outdoor activities available to the North American sportsman.

More than anything, though, I came to understand much better what my father had tried to explain to me that evening. While game departments might set seasonal and bag limit regulations, the laws of sportsmanship are highly personal, and they are, indeed, relative. Relative most of all to the sportsman himself.

What makes one man satisfied with shooting a deer over a corn feeder in Texas is totally foreign to the backcountry hunter who hikes into the Maine swamps for his buck. What makes a Stuart angler battle his sailfish on 20-pound tackle and then release it is incomprehensible to the Port O'Connor skipper who gloats over the same fish hung on the dock beside his 80-pound tackle.

It is far too easy for sportsmen to criticize each other, for the

fly-fisherman to sneer at the hardware anglers, for the casters to scoff at the trollers, for the small-bore crowd to belittle the big-bore gunners, for the trophy hunters to downplay the meat-getters.

It's far too easy to forget that these are personal sports, that the reasons for going are individual reasons, and that each person is looking most of all for something from within himself. Sport is relative, relative to a person's experiences, to his particular needs.

As our physical outdoor world diminishes more and more each year, as our forests shrink and our marshes are drained, as the crowds grow and we find ourselves increasingly forced to share what solitude we have left, it becomes even more important for the outdoorsman to make the most of each experience, for him to recognize what his own sporting needs are and then to pursue them, to constantly elevate the quality of his sport.

I thought of these things that morning up on the rimrock overlooking Joe's ranch. I thought of my father, and of my friends down below me, and of the eternal rush of the wind as it roared down through the canyon.

I'd foolishly worked up a sweat as I climbed the ridge, so I sat shivering for an hour as my damp clothes cooled against me. A golden eagle swept over me and landed 50 feet away in a gnarled snag, black and huge in the bright moonlight. I pressed closer against the rocks, unsure just what he'd make of my gray Stetson moving, and was somewhat relieved when a short time later he soared away.

Dawn came finally, bringing with it the boom of rifles in the distance. I watched a doe work her way up the slope across from me, and heard shots from the flats where Monty and Jack were. Looking through my binoculars, I could make out herds of tiny ant-figures funneling up toward me, and I felt a warm glow as I watched two equally small orange figures walking out to gray dots in the short-grass meadows.

I waited, and eventually the deer worked up to me. I knew my partners had their deer, knew our time was short, and though I'd hoped for a big-racked muley buck, when a forkhorn came up the trail beneath my tower of rimrock, I dropped him as he stepped across a log.

I could probably have gotten a bigger buck, could certainly have jumped one during the morning by still-hunting the ridges. But that wasn't the point. For me, that morning, the hunt had been to go up in the dark, to find that rimrock laced with deer trails, to take a mule deer buck with a clean shot and then drag it down to the sage, to look out over the drop to the prairies and savor an October morning in the Montana pines.

The next morning, with our deer and turkeys hung in the Ekalaka locker, with a slight headache from saluting the end of a fine hunt the evening before at the Old Stand Bar, I stood shivering in a phone booth at the edge of the town's dusty main street and listened to the voice telling me my father had died. I watched leaves skitter past in the wind, and then walked back along the deserted street, stopping for a moment to look at a big antelope buck in the back of a pickup.

A relative thing, this sport of ours. A highly personal experience, one that comes from within. And I don't know about such things, but my guess is, my old man was up there with me that morning, looking out over the great sweep of the land, listening to the wind come up with the dawn, looking down through the pines and picking out his own buck, or maybe just watching, waiting.■

THE BLACKFOOT CHALLENGE

by DON PETERS

THE TROUT THAT ENDURE in the Big Blackfoot River owe their grit to the harshness of that water. In a 1976 book, "A River Runs Through It and Other Stories," Norman Maclean provided keen insight into the biology of the Blackfoot River fishery: "It is a tough place for a trout to live—the river roars and the water is too fast to let algae grow on the rocks for feed, so there is no fat on the fish...." And he pays tribute to the wild river and wild trout that live there, "It isn't the biggest river we fished, but it is the most powerful, and per pound, so are its fish." The fish are a product of the land and of the water running through it.

The Blackfoot Valley was shaped both by glacial ice and a large glacial lake. Large glaciers extended from the high peaks to the valley floor, and the modern river runs through the bouldery debris and fine silts these ice age events deposited. The glacial ice mass carved the mountains in the northern half of the basin. Like a massive conveyer belt, the ice mass deposited the carvings—a mixture of boulders, cobbles, sand, and silt—into rolling hills on the valley floor.

Meanwhile, glacial meltwater streams laid down large flat outwash deposits of sand and gravel between the rolling hills. Near the end of the ice age, glacial Lake Missoula formed and began to fill with the muddy meltwater. The glacial lake filled the valley with water as far as Helmville. Fine silts settled to the lake bottom along with large boulders dropped from floating iceberg rafts. The interaction of these larger-than-mankind events created a diverse land and water drainage system. For example: Several streams go underground, reappearing as crystal clear spring creeks; other streams carry fine glacial sediments that almost refuse to settle out of the water once suspended; and some stream channels are still rebounding from glacial events that occurred thousands of years ago. The present-day Blackfoot River is a product of its past.

PAUL UPDIKE

IF YOU CAN, WATCH THE BLACKFOOT through all seasons. In the fall, as early as November, it freezes along the stream bottom, and

large ice mats blanket the stream bottom in some sections throughout the winter. It warms for a brief period from July through August, but then temperatures plummet back to freezing for another seven months. It seems to flow mud in the spring floods and lately even in the summer after rainfall. Hard sedimentary rocks dominate the drainage and thus the soils and water that run through it are only moderately productive.

In 1988, department biologists sampled fish in the Blackfoot River from the headwaters near the town of Lincoln to the mouth at the town of Bonner, and their research revealed some characteristics about the river's fishery. Species and abundance vary considerably throughout the river. Cutthroat and brook trout dominate the Big Blackfoot headwaters above Lincoln. Brown trout rule the roost from Lincoln to the mouth of the North Fork of the Blackfoot River. Rainbow and brown trout share dominance to the mouth of Monture Creek. Rainbows dominate from Monture Creek to the river's mouth near Bonner. In almost all sections, there were fewer trout than expected. The sampling showed native fish—bull and cutthroat trout—in such low numbers that viable wild populations are in serious jeopardy. The best spawning run of bull

"Several fish habitat improvement projects are under way to restore past land and streamside management mistakes and several more projects are being developed. . . Superb efforts by private citizens, primarily through the Big Blackfoot Chapter of Trout Unlimited, have started the restoration efforts."

trout from the river into a tributary resulted in only 12 redds or spawning beds. Mining pollution in the headwaters appears to have decimated a once thriving cutthroat fishery. Lethal mining spoils held dormant in a settling pond for decades were released in 1975 when the pond embankment failed; the waste material continues to move downstream.

The bull, cutthroat, rainbow, brook, and brown trout seek tributary streams for spawning. The tributaries provide the clean gravel necessary for successful incubation of their eggs. But even in the tributaries, the trout's reproductive success has been affected by drought and by landslides and fires which have increased fine sediment accumulation in the stream channels. In addition, culverts and irrigation diversions block access to some spawning streams.

The extensive harvest of commercial forests has added additional silt to the already overloaded system. Despite these repeated insults, the river's quality and its fishery have been advanced in part by recent restoration efforts and periodic floods that flush the sediment downstream and by the revegetation of disturbed areas.

Because of the importance of reproduction to the wild trout fishery, state fishery biologists have taken a close look at the numbers of newly hatched fish or young of the year in the

Blackfoot River

Blackfoot tributaries. In 1989, a crew of FW&P fisheries workers sampled newly hatched trout at 62 locations in 19 of the larger tributary streams. Fish sampling in some streams, which were known bull trout spawning areas in the past, failed

GEORGE WUERTHNER

to locate any young bull trout. Only one of 19 had what could be considered an adequate number of young bull trout.

While more widespread than bull trout, young native cutthroats were found in good numbers in only eight of the 62 sections. Young rainbow and brown trout were found in only the lowest stream sections throughout the drainage. No obvious physical barriers prevented further upstream movement by spawning rainbow or brown trout. It appears instead

that environmental limitations in the middle and upper reaches of the tributaries deny successful colonization by these non-native species. One might further suspect that even in the lower reaches of the tributary streams, conditions are less than ideal for rainbow and brown trout.

In 1988, biologists looked closely at the number of young newly hatched trout throughout the mainstem of the river and found good numbers of young rainbows from Scotty Brown Bridge near Monture Creek to the mouth. Although good numbers of young fish usually mean good numbers of larger trout, the Blackfoot River is an exception to the rule near Scotty Brown Bridge. Biologists found only about 250 rainbow and brown trout longer than six inches in the bridge area. This is a poor population. In the Blackfoot River near Johnsrud Park, rainbow densities of 1,100 per mile occur, but they average a mere seven to eight inches long. Good survival of young of the year and yearling rainbow trout in the Johnsrud area accounts for these much higher fish densities.

Few spawning age fish suggests the population is on a collision course with oblivion. Few spawners over several years translates to a vicious downward spiral—fewer young and fewer spawners. In 1989, biologists found extremely low numbers of spawning size fish even in the Johnsrud area. Anything that reduces spawning success (sediment increases, drought, reduced spawners) speeds the downward trend. Throughout the Blackfoot River and tributaries, good reproduction and early survival seem to be consistent problems.

DAVE McGEE

THE NATIVE FISH SPECIES have evolved with this environment and they appear best suited to survive here. Their life cycles are closely tied to the tributary streams that serve as spawning and rearing areas. The river cutthroat and bull trout live in the tributary streams for several years after hatching before migrating downstream to the main river. They return to the tributaries later in life to start the process over again. A second strain of cutthroat remains in the tributary streams all its life. This resident strain does not grow as large as the migratory cutthroat, but except for size, the two appear identical. However, these two strains are as different as you and I. The importance of both cutthroat strains gives added significance to protecting the tributary streams as well as the main river. The tributaries are essential to the future of the main river fishery.

Obviously, special management efforts are necessary to restore and enhance the Blackfoot fishery. New regulations have been implemented to reduce the harvest of spawning size fish and to stop the harvest of native species. A "three fish, none over 12 inches" regulation on rainbow and brown trout and catch and release only for cutthroat and bull trout should accomplish these goals. These restrictions are intended to allow fish populations to regain former numbers.

A second strategy to enhance the Blackfoot fishery has already begun. Several fish habitat improvement projects are under way to restore past land and streamside management mistakes and several more projects are being developed. All government agencies with responsibilities in the Blackfoot are involved with active restoration programs in the Blackfoot, including the Bureau of Land Management; U.S. Forest Service; Montana Department of Fish, Wildlife & Parks; Montana Department of Health and Environmental Sciences; and Montana Department of State Lands. Superb efforts by private citizens, primarily through the Big Blackfoot Chapter of Trout Unlimited, have started the restoration efforts. Individual private citizens and groups continue to provide money and significant amounts of volunteer time to the restoration and protection of the Blackfoot River.

As habitat, pollution, and recruitment problems are addressed, we are optimistic that anglers on the Big Blackfoot will see significant improvements. ■

Angling restrictions and stream habitat improvement projects should help trout populations regain their former numbers.

READERS RESPOND

TOM WARREN

"DO YOU REMEMBER WHEN...?"

I am a subscriber to *Montana Outdoors* and when I opened up my Jan./Feb. 1991 issue, I saw the picture on the inside front cover and there was my son and grandson.

Not really—but if you had them stand in a pose like that in the picture, you would think it was the same fellows. It inspired me to write this note to them, and I thought you might like to see it.

My son Brad has lived in Kalispell for 15 years and is the manager of KALS radio station.—*Dale Rauch; Broomfield, Colorado*

The Making of Memories

As I look into this picture I can see my son, Brad, and his son, Jeremy, as they are savoring the end of a successful day.

The day may be ending, but the memories are just beginning. In my memories, I can see myself here when Brad was just a young fellow.

Just like the morning began, with the small amount of light, they had to see their way up the mountain. Now the last glimmer of this day will let them see their way back to camp.

Now as a granddad, I can't go to the top of the mountain anymore, but I can pull up the memories of a day just like this and feel good that I had a turn once upon a time.

It is good to see my son and grandson making these kinds of memories. I know also, that someday as they look back on them as I do, they will say, "Do you remember when...?"

There isn't any place as serene as the top of a mountain at any time of the day. However, I believe the evening is a more special time for me, as the shadows fall across the high meadows and the night animals come out and the sounds start to change as it cools down. It is *special.*

Memories. Ah, memories. Make a lot of them now, for tomorrow may be too late.

"SLIGHTLY ENTHUSIASTIC ABOUT MONTANA"

Oh, to have been born in Montana instead of western New York state. As a youngster in the 1930s and '40s, I eagerly read about Montana and dreamed of someday seeing the Yellowstone, Madison, and all the other famous streams and rivers.

After WWII service, I became a radio announcer. I remember reading *Broadcasting Magazine* and fantasizing about getting announcing jobs in Livingston where management always extolled the trout fishing on the Yellowstone. I was always in places like Flint, Michigan, or Garden City, Kansas, and could not afford a move of that magnitude.

After marriage and five children, we moved to Colorado where we have lived for over 30 years. Five years ago, my youngest daughter married an Air Force officer and moved to Malmstrom AFB at Great Falls. For a few years, my wife and I were in seventh heaven as we "experienced Montana," from Hardin to Browning...Bridger to Roundup...Glacier to Ennis...Great Falls to Augusta...and on and on.

What adventures we have had! We have felt the strong winds around Livingston as we beat a path on I-90 toward Bozeman, raced a snowstorm eastbound from Helena in January, enjoyed June camping in the Little Belts, were concerned for the health of the residents of Gardiner because of smoke and haze after the fires of Yellowstone.

You might say we are slightly enthusiastic about Montana.

Your *Montana Outdoors* magazine is superb, and the May/June 1991 issue is a marvelous piece of work. I thoroughly enjoyed Tom Palmer's "Madison Midsummer" and loved his encounter with the "Wall Street" experts. (What talent Palmer has!) Janet Ellis gets my thanks for her enlightening article on bank swallows. My first encounter with these little guys was one afternoon driving south on 191 near Sweet Grass. Craig Jourdonnais demonstrated keen perception and moved me with his story about "Spring Mountain." Stories like these excite me enough to move to Montana. Do you welcome newcomers if they mind their own business?

Montana has assembled a highly qualified staff to produce an extremely fine outdoor magazine which I look forward to receiving and enjoy immensely. My daughter's husband has a new assignment in Space Command in Colorado Springs and we do not visit Montana as frequently. However, she has presented us with two Montana natives: David, 3, and Daniel, 2. They are a real link since they were born in Great Falls.—*Sterling M. Campbell; Woodland Park, Colorado*

PHONE HOME!

The "Rosebud Revisited" article in the May/June issue of *Montana Outdoors* was superb!

My congratulations to the author, Doug Monger. His thorough research and enthusiasm were evident in the story. —*Jim Monger; Highland, California*

P.S. Doug—call your mother!

FW&P fisheries biologist Don Peters explains the importance of streambed habitat during a Project WILD workshop conducted for educators at Lee Metcalf National Wildlife Refuge.

BEYOND TEXTBOOKS AND CLASSROOMS

story and photos by JIM KEENER

WITH THE GRAY SATURDAY MORNING SKY threatening to show just how wet our planet really is, Kathy Hatch fills a five-gallon bucket from the Bitterroot River. She tells the 20 educators gathered at the Lee Metcalf National Wildlife Refuge that the bucket of water—1,280 tablespoons—represents all the water on Earth. However, because of salt water, most of the water on the planet is not fit for many animals or humans to drink.

Hatch then instructs teams of people to fill a container with all water other than ocean water. This equals only 34 tablespoons. From this smaller amount of drinkable H_2O, she asks the adult students to remove the amount of liquid represented by all freshwater lakes and rivers, one-tenth of a tablespoon. And finally, she tells the group to take out the water represented by only the planet's rivers. This amount comes to one-thousandth of a tablespoon. These educators spooning river water are participating in an activity designed to show the fragility of our planet's freshwater.

Put on by Project WILD, the workshop is showing educators how they can bring lessons about the environment into their classrooms. In a state as wide as Montana, with flowing rivers and high-mountain lakes, we can easily forget that our water supply is fragile and limited. We need to know that delicate choices exist whenever and wherever we make natural resource management decisions. Project WILD, a conservation and environmental education program used in public schools in 49 states and 10 Canadian provinces, helps to teach educators and children about those choices. The objectives of Project WILD's activities are to help children learn how to think, rather than what to think, about the critical value-sensitive issues involving wildlife

and the environment.

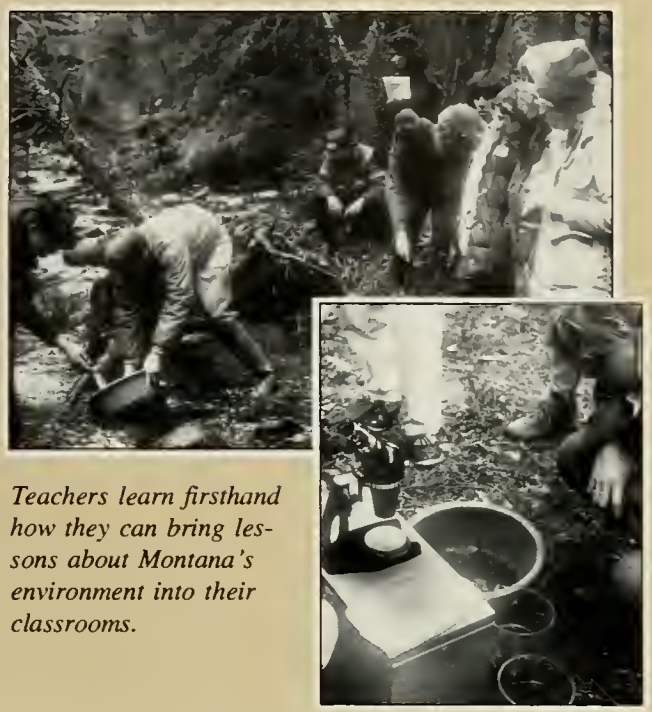
The workshops prepare teachers to use Project WILD materials and activities with their students. The activity that Hatch led, "How Wet is Our Planet?" is only one of 30 activities contained in the recently developed Project WILD Aquatic Education Activity Guide, a book given to all workshop participants. Although designed to be accomplished in the classroom in one hour, a discussion and activity showing the breakdown of the earth's water supply becomes a bit more real when done outdoors, with a river flowing in the background. Hatch, one of 23 facilitators across the state trained by personnel from the Office of Public Instruction and the Department of Fish, Wildlife & Parks, teaches other educators at workshops conducted around the state throughout the year.

An elementary teacher in Butte, Hatch suggests that the group try this activity with students, discussing how many species, including humans, depend on this finite fraction of freshwater for survival. In closing the wet planet activity, Kurt Cunningham, Project WILD coordinator for FW&P, reminds the group that Project WILD's activities are interdisciplinary and spread across the curricula. "The Project WILD aquatic exercises," he says, "can be used to discuss the politics of water, and they also fit well into existing science, math, geology, history, and social studies courses."

The group then boards a bus to the Charles Waters/Larry Creek Recreation Area north of Stevensville. A short walk along a small creek and they are ready for their next activity. Don Peters, FW&P fisheries biologist in Region Two (Missoula), and Cunningham lead a discussion on riparian (streamside) habitat.

Peters begins by holding up two large beakers of pebbles and water from the stream. He talks about the causes of silt, and the problems that can arise for streambed habitat when there is too much or too little silt. The group listens intently as he talks about the "creepy, crawly critters tucked away in the crooks, crannies, and crevices of a streambed" and how too much silt can have negative influences on the tiny places where fish and aquatic insects lay their eggs.

WITH WADERS ON and a hand-made screen drift net, Peters catches some aquatic insects for the group to look at under magnifying glasses and a microscope. He collects rocks and, attached to them, the larvae waiting to come alive when the time is right. He catches small cutthroat and brook trout and discusses their physical features. And he talks about fish behavior—when they feed, where they go at night and in winter. This activity provides vital connections between textbooks, classrooms, and the natural world. When used with children, the discussion of riparian habitat helps to break down arbitrary boundaries they may have set up that separate aquatic and terrestrial animals and habitats.



Teachers learn firsthand how they can bring lessons about Montana's environment into their classrooms.

Montana students spend more time learning about the environment than their counterparts in areas of the country with less wildlife. According to results of an independent public opinion poll conducted in June 1990, Montana ranks higher than the regional and national averages in students' knowledge of how ecological systems work as well as awareness of the importance of responsible decision-making concerning wildlife and the environment.

Since Project WILD's introduction in 1984, 3,000 Montana educators have taken the classes. Most of the state's teachers taking the workshops agree the program provides a "balanced and fair approach to the study of wildlife and environmental issues."

Since today's children will be making tomorrow's natural resource policies, it is important that they have the knowledge and skills to make well-informed choices between human use and wildlife needs. Project WILD gears its activities to instill a strong environmental ethic in participants, with the goal of well-informed citizens who will make the land-management decisions of the future. ■

Interested in bringing Project WILD to your classroom, group, or organization? For more information about workshops and how you can attend, write to: Kurt Cunningham, Project WILD coordinator, Department of Fish, Wildlife & Parks, 1420 East Sixth Avenue; Helena, MT 59620 (406/444-1267) or Bob Briggs, Office of Public Instruction, State Capitol; Helena, MT 59620 (406/444-4439).

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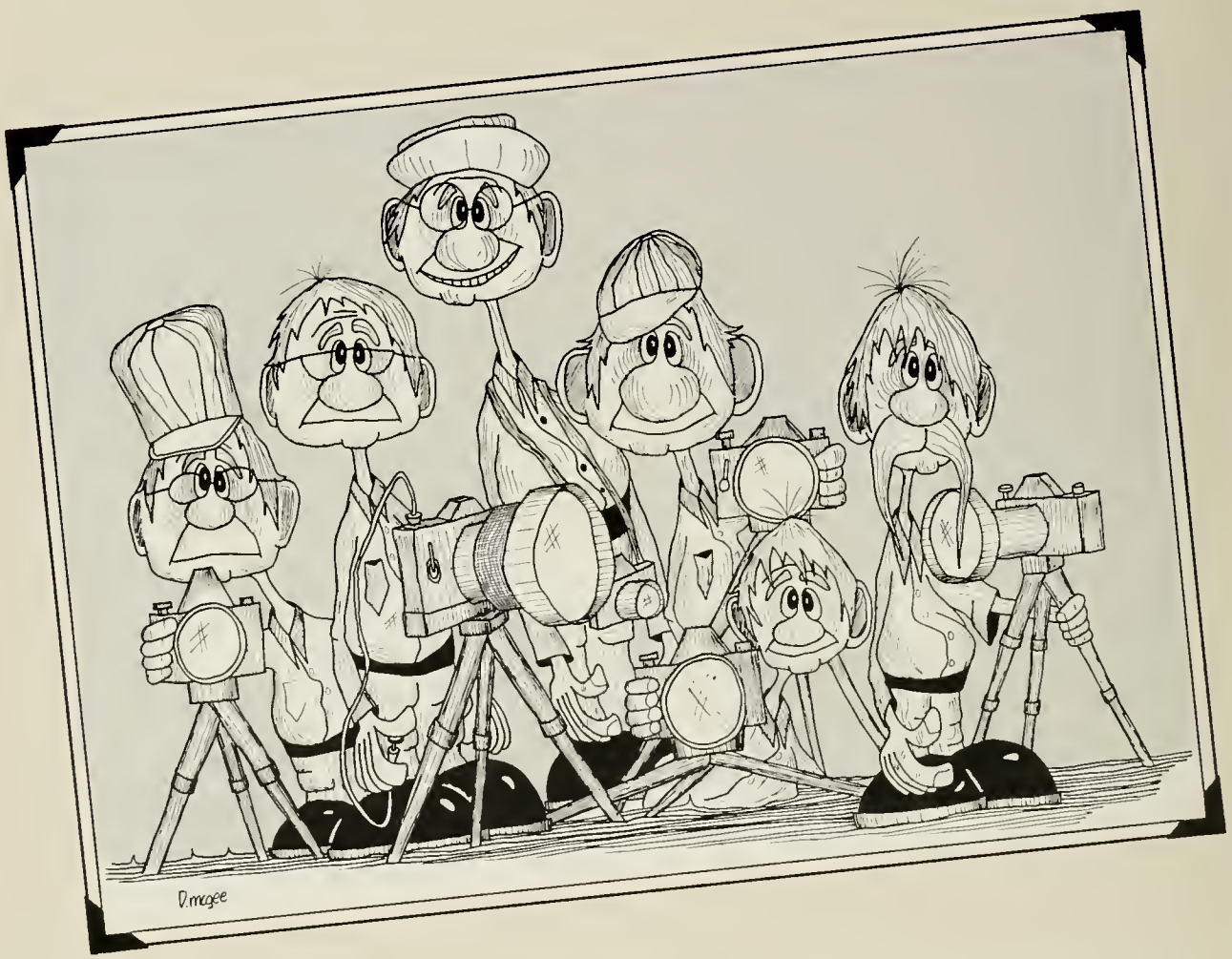


★ big furry fellows ★ fantastic flowers ★ small fuzzy fellows ★
★ flashing fishes ★ flaming sunsets ★ folks enjoying outside fun ★

IN *MONTANA OUTDOORS'*

Eleventh Annual

SPECIAL PHOTO ISSUE

Submit your color transparencies to Bev Veneziano, art director, *MONTANA OUTDOORS*, 930 Custer Avenue West; Helena, MT 59620 (406 / 444-2474).

DEADLINE: SEPTEMBER 20, 1991

MIKE LOGAN

THE GREAT MONTANA CHICKEN RANCH

by TOM HINZ

WHEN I WAS A KID growing up in the 1950s, Lidgerwood, North Dakota, was a quiet farming town. My grandfather, who lived in the middle of town, was the local veterinarian. When our family visited grandma and grandpa, my brother and I usually found Lidgerwood a little lacking in entertainment possibilities. Harassing the chickens penned up in the neighbor's backyard sometimes offered an intriguing diversion, especially when sand or dirt thrown at them elicited a feathery white stampede through the neighborhood. I was always impressed, though, by the comparative ferocity of the old rooster, who more than once put the run on two young rascals. One might even learn to admire the tenacity of the white leghorn, one of the best known species of domestic American fowl.

For decades, chickens have graced all manner of Americana, their images appearing on everything from boxes of corn flakes to Fourth of July fireworks. American cold sufferers have for years been nursed back to health by a watery concoction of noodles and tiny chunks of chicken. Chickens have come to

symbolize health-conscious eating—a skinless breast is regarded as a high-protein, low-fat way to include meat in a meal. Chickens wake people up in the morning, and they also attempt to produce offspring which end up as the perfect companion for bacon, at least for those fortunate enough to have a blood cholesterol level below 200.

Chickens are members of the order of birds called Galliformes. This group includes not only the domestic chickens but also an interesting array of wild species not typically seen on cereal boxes. Like their domestic relatives, these wild species have evolved with a high degree of tenacity, enabling them to withstand the cruelest Montana winters. Like their farm counterparts, these birds are also responsible for waking Montanans early in the morning, especially in the fall.

Montana in pre-settlement times was home to five species of wild "chickens": sage grouse, sharp-tailed grouse, blue grouse, spruce grouse, and ruffed grouse. Following settlement, exotic chickens were brought to Montana from Europe, China, and other parts of the United States, notably the ring-necked pheasant, two species of partridge, and the wild turkey. Prairie chickens also invaded northeastern Montana during the sodbusting days of the early 1900s. As a result, one might say that Montana is indeed one big chicken ranch.

In the early days, there were so many "sage chickens"—as the old-timers called them—that they were the number one upland game bird in Montana and in eight other states. The daily limit for "prairie chickens" (sharp-tailed and sage grouse) in the late 1800s in Montana was 100 birds. Certainly, there must have been plenty of them for the limit to have been set so high. Pheasants, newcomers to Montana in the early 1900s, also became abundant shortly after they were introduced.

In fact, Department of Fish, Wildlife & Parks records show that landowners complained of significant crop damage caused by the hordes of pheasants on their land. As recently as 1948, Montana hunters harvested 198,000 pheasants in a 12-day season. This represents a kill per day roughly 15 times that of today's harvest. What happened to all those birds?

THE PLAIN TRUTH is that, today, chickens are comparatively scarce on the great Montana chicken ranch. In fact, some pretty big areas have practically no grouse, pheasants, or partridge remaining.

I was recently invited by a sportsmen's club in Glasgow to talk about upland game birds and the department's upland bird program. I drove from Helena to Glasgow and then on to Bozeman, a total trip of over 800 miles. In all that driving I saw not one grouse, not one partridge, not one turkey. Along the highway I saw one harem of about seven hen pheasants and two or three male pheasants crowing from territorial perches. Admittedly, counting birds from a moving vehicle at 55 mph on major highways, during midday, at a time of year when game bird populations are near their annual low is hardly an approved survey technique. Yet, it doesn't always take a scientific study to confirm the obvious.

"The plain truth is that, today, chickens are comparatively scarce on the great Montana chicken ranch. In fact, some pretty big areas have practically no grouse, pheasants, or partridge remaining."

As the department's Central Flyway waterfowl biologist for several years, I did a lot of driving around the eastern two-thirds of the state overseeing the development of waterfowl habitat projects. In an average month I would travel 1,000 to 2,000 miles, and I enjoyed seeing many types of wildlife—mule deer and antelope sightings were commonplace, since they are among the most visible of eastern Montana's wild creatures. But when I would see some grouse or other upland game birds along the road it was always a treat. In a few years and in choice locations, I learned that I could almost always count on seeing some birds. Yet, I tended to overlook those huge expanses of country where I seldom if ever saw a "chicken."

Did I become so accustomed to seeing upland birds in only a few locations that I came to accept it as all the land now produced? Had I come to unconsciously accept the lack of birds as the norm?

On another trip from Helena to Malta this past February, I resolved to do a rough qualitative inventory of winter upland bird habitat along a portion of the route. Using only a portable tape recorder and the odometer on my truck, I recorded descriptions of the types of land use I saw out my window as I traveled along Highway 2 and Highway 87 from Malta to Box Elder. My qualitative descriptions included terms such as "ungrazed riparian area," "lightly grazed sagebrush grassland," "cut alfalfa or grass hay," "fallow," and others. This windshield survey through typical eastern Montana chicken habitat happened to come at the time of year when bird populations are approaching their annual lows. Because of the severity of most Montana winters, winter is the low bridge which knocks the top off populations for the year. It is the time when availability of food and cover is most crucial. Even if spring, summer, and fall offer abundant food and cover for upland birds, populations can never build to high levels where winter cover and food are inadequate. It was this knowledge that motivated me to attempt to qualitatively measure how good or how bad this representative strip of the great Montana chicken ranch looked last February.

MY WINDSHIELD TOUR began in Malta in late afternoon. It ended around sunset on the outskirts of Box Elder, 117 odometer miles to the west. It followed in large part the Milk River, one of the most fertile valleys in Montana. It passed through rolling hills of sagebrush and grass, huge expanses of winter wheat

fields, and through the towns of Dodson, Harlem, Chinook, and Havre.

Although my survey was not replete with action-packed encounters with wildlife, it did have some interesting moments. In Dodson I was amused by a small flock of wild turkeys that lazily trooped through the streets, seemingly unaware that they were doing an unwild thing for a supposedly wild bird. South and west of Havre a small herd of white-tailed deer loped across the highway in front of me, anxious to get an early start on grazing a farmer's wheat field.

When I had nearly filled two tapes with field-by-field descriptions of the amount and density of cover and the possibility of game birds finding food or cover there, I began the job of editing the tapes and recording on paper what I had seen. Eighteen pages of paper and two days later I had a descriptive list of several hundred different fields with varying degrees of bird cover ranging from very poor to very good.

I lumped these fields and pastures into habitat areas according to whether they were non-habitat, marginal habitat (unlikely to support birds in bad winters), adequate habitat (birds would find food and/or cover in most winters), or good habitat (plenty of woody and herbaceous cover and food). I found that 68% of the areas fell into the category of non-habitat or marginal habitat. These areas included fallowed fields, cut hayfields with no residual cover, intensively grazed hayfields and pastures, residential and business areas, plowed fields, and intensively grazed riparian areas. In other words, I judged more than two-thirds of the areas to have too little cover and food to support birds through the winter.

Of the remaining 32% of the areas, most had only adequate winter cover.

MIKE LOGAN

RODNEY SCHLECHT

RODNEY SCHLECHT

Ring-necked pheasants (top photo) were brought to Montana from China, while Hungarian partridge (middle photo) were imported from Europe. The sharp-tailed grouse (opposite) is a native species.

These areas included idle hay lands, some marginal CRP (Conservation Reserve Program) stands, weedy areas, and lightly grazed grass/shrub lands.

I considered 11% of the area to be good winter habitat, consisting of ungrazed riparian areas, shelterbelts, shrub thickets, croplands with undisturbed stubble, and ungrazed shrub/grasslands with abundant ground cover.

If this windshield survey has any validity, it points out what I suspected to be the case even before I did it. The fact that only about a tenth of the area through which I drove had adequate winter food and cover for upland birds bears sufficient testimony as to why they seem to be only sporadically distributed throughout the area.

In traveling around the state to meet with sportsmen's groups, agricultural producers, public land managers, and others, I have never encountered anyone who would argue the point with me that upland game birds are quite scarce in a lot of areas. Where most differences of opinion arise is in deciding on the causes for this scarcity. In some areas there are those who believe that good habitat still exists, but that pheasants for some unexplained reason have simply disappeared. The obvious solution in their minds is to reintroduce pheasants into the area.

Others feel that the birds are there but that they just need a little boost by bringing in some "new blood"—i.e., birds from other areas to help rebuild the population. Some sportsmen support importing pheasants from China to get "ancestral stock" rather than using the hand-reared game farm birds so popular with most pheasant stocking advocates.

Many of the people I talk to insist that it is coyotes, foxes, skunks, hawks, or other predators that are responsible for keeping our game bird populations down. Predators, although certainly the guilty party in many game bird fatalities, are simply carrying out the death sentence for birds trying to persist in areas where inadequate food and cover leave them vulnerable. Planting more birds under such conditions simply pours more birds down the same drain.

The early introductions of exotic species in Montana, if not throughout North America, were very successful because there were vast areas of habitat which they could rapidly pioneer. Predators were not a problem because habitat was excellent and available in huge quantities. Crops were grown on small acreages with plenty of dense vegetation between fields in which birds could find refuge.

AS THE FATHER of five children, and anxious to brainwash each of the little darlings into my way of thinking about the importance of environmental quality, I encourage them to watch nature programs on television. Somewhere deep down I feel that there is more real entertainment in watching a brood of newly hatched sea turtles run a gauntlet of gulls to cross a sandy beach to the safety of the sea than in watching a band of turtle thugs enforce law and order in the sewers of some imaginary city. I'll admit that my case would be stronger should one of the fledgling sea turtles cry "Cowabunga dudes!" just as he and a couple of tired and thirsty litter mates finally reached the incoming surf.

The vast majority of nature programming on television these days can be a little confusing, though, depending in part on who produces the programs and what their motivation is for doing so. In almost every case, a population of birds, a troop of primates, a reef teeming with marine fish, or some obscure South American mammal is to some degree at peril in terms of its future. Invariably, the narrator describes the species' destruction at the

GREG RISDAHL

In the late 1800s, sage grouse were the number one upland game bird in Montana and in eight other states. The daily limit for "prairie chickens" (sage and sharp-tailed grouse) in Montana was 100 birds.

DAVE BOOKS

Arising from earmarked funds from the sale of bird hunting licenses, the upland bird enhancement program has so far generated more than $2 million. These funds are used to improve bird habitat through range management programs, shelterbelt plantings, establishment of nesting cover and food plots, and wetland restoration.

hands of man, often by poachers, hunters, or polluters.

It occurs to me that each of these species, communities, or populations of animals is experiencing basically the same type of pressure to survive as Montana's wild chickens. In plain English, human development and habitat degradation have reduced the ability of many wildlife populations to sustain themselves.

One apparent solution to the problem on the great Montana chicken ranch is obvious. If we planted the prairies back to grass and shrubs, removed the livestock, and curtailed any further growth in human populations and residential development, we would undoubtedly have lots of upland birds. But such a program, though beneficial to wildlife, would not be beneficial to Montanans whose lives are tied so intimately to the land. So what is the best approach?

The evolution of environmental impact in most areas follows a "pendulum" pattern. Initially the pendulum swings too far in one direction, and the environment is degraded. Then people get involved and put a stop to further development and degradation. The pendulum swings to the opposite extreme. Eventually, an equilibrium is reached. So it is with Montana's chicken habitat. Partly in response to the decline in bird populations over the last 30 years, Montanans worked through the Legislature in 1987 to pass a bill providing for a pheasant enhancement program. Under the guidelines of this program, FW&P was charged with reimbursing private individuals for raising and releasing pheasants into the wild to restock depleted areas. Two years later the Legislature amended the original legislation so that funds remaining from the pheasant stocking program could be used to enhance habitat for all upland birds. The program thus became the most significant habitat initiative ever enacted in the state for restoration of upland bird populations and their habitat.

Arising from earmarked funds from the sale of bird hunting licenses, the program has so far generated more than $2 million. These funds are currently used to improve bird habitat on state, federal, and private lands through range management programs, shelterbelt plantings, establishment of nesting cover and food plots, and wetland restoration. To date, more than 200 landowners are cooperating in the program, as are a number of soil conservation districts.

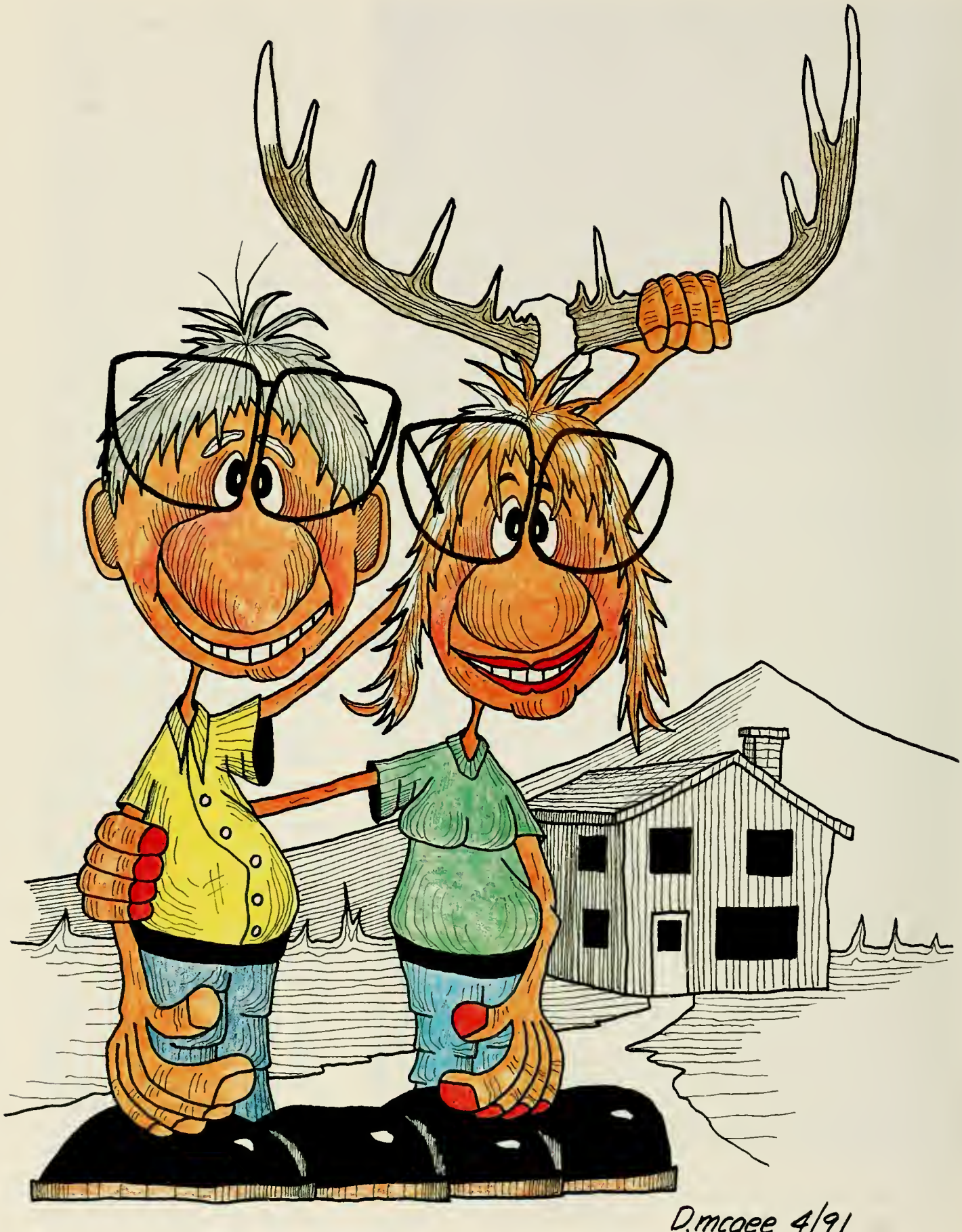
The majority of completed projects have been aimed at establishing and improving nesting cover. These projects have involved such things as altering existing grazing systems to leave more cover for birds, replanting grasses and legumes in areas previously devoted to crops, and paying landowners to plant CRP acres with a mixture of grasses and legumes.

Planting winter cover, particularly shelterbelts, has also been a vital part of the habitat enhancement program. In areas where shelterbelts provide the only significant woody cover, they can make the difference between pheasant survival during hard winters and total loss of a local population.

In some cases, food plots have been planted or grain has been left standing for birds to use in the fall, winter, and spring. In intensively farmed areas such as some river valleys, preparation of fields for spring planting means that stubble fields are usually plowed before winter arrives. Leaving grain for birds under these circumstances may enhance their winter survival if adequate cover is also present.

Whether the upland game bird habitat enhancement program will ever change enough of Montana to increase bird populations statewide in a major way remains to be seen. But the prospects are encouraging. We know the CRP program has been successful in boosting bird populations in some areas, and the upland game bird habitat enhancement program should have similar or even greater benefits.

In the long term, the program should result in improved soil and water conservation, increased bird populations, and a better chance for future generations to enjoy the natural and aesthetic values of Montana lands. Individuals, sportsmen's clubs, or other interested groups and agencies interested in cooperating on the upland game bird habitat enhancement program are encouraged to contact their nearest FW&P office. ■


D.mcgee 4/91

My Horns, My Heads, Her House

by WADE FREDENBERG, illustrations by DAVE MCGEE

"OVER MY DEAD BODY!" Those words, spoken by my loving spouse of the past decade, are about the only printable response to my repeated requests to hang my hunting trophies in our house. Every marriage has its sore spots, those irreconcilable points of contention impossible to resolve with logic. In our case it's the four H's—horns, hides, heads, and hooves.

I don't really know why my wife holds so much disdain for those trophies I'm so fond of. I've tried to probe her past to find out if she may have had a bad experience related to a wild thing, but to no avail. It's not as if I want to fill the house with trophies. I wouldn't even consider putting a mounted baboon in the living room, as one of my associates has done. All I've got is a couple of six-point bull elk racks, a gorgeous non-typical whitetail head, a few antelope horns, and Colombo (the mountain goat I shot on

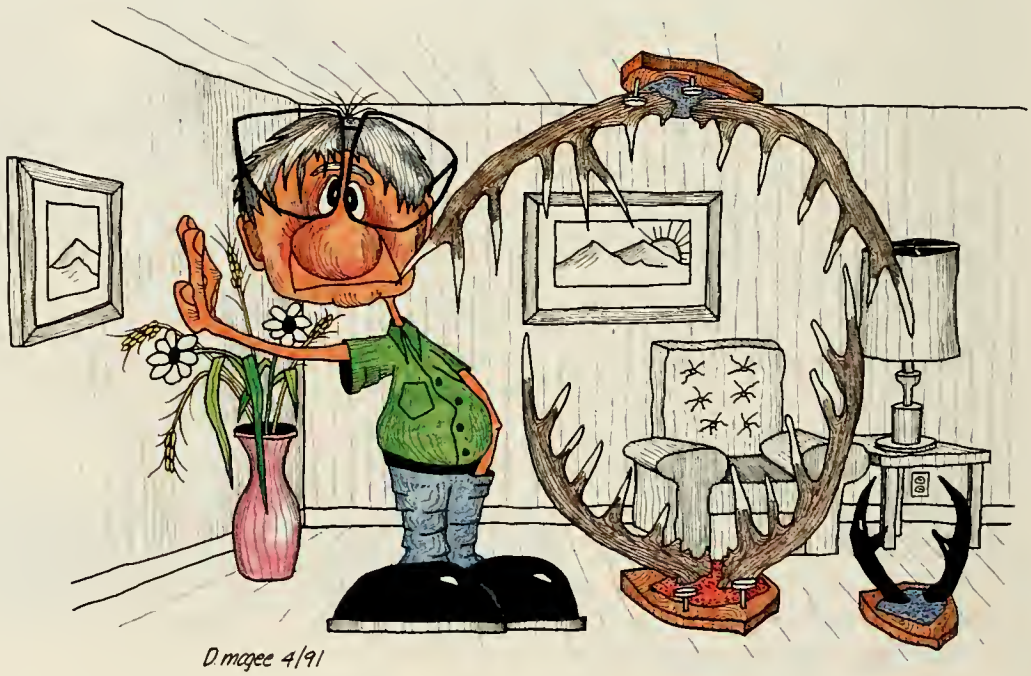
Columbus Day). I tried to explain to her that my ancestors were hunters and gatherers. She must descend from an agricultural clan since she prefers to decorate with flowers and dried wheat.

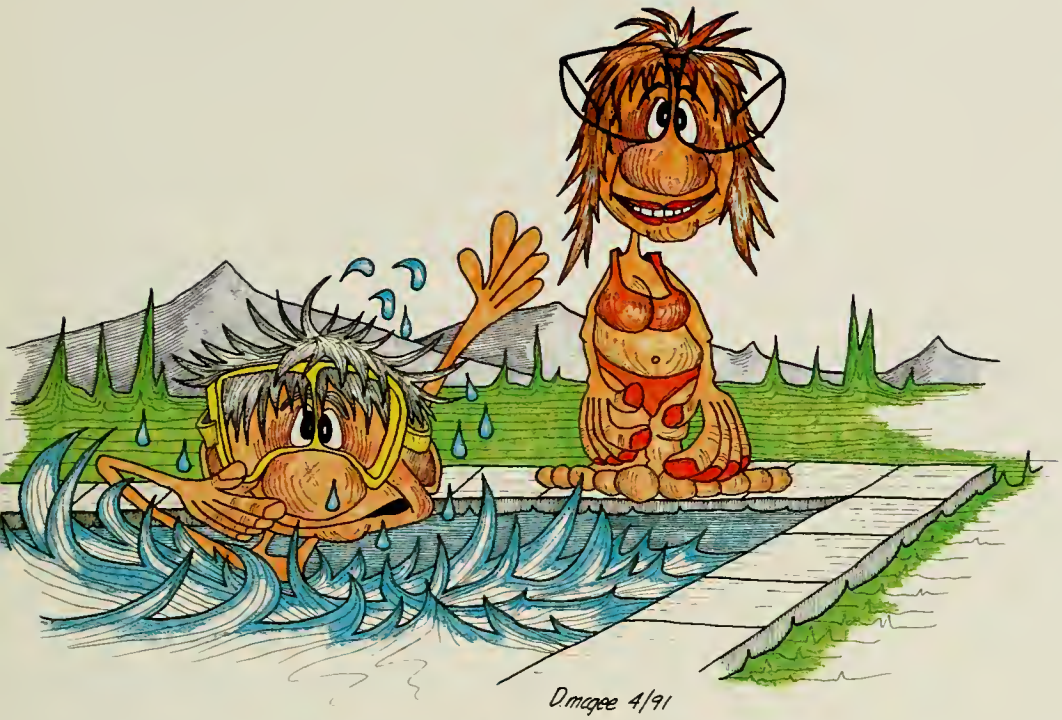
My trophies are just a few wholesome artifacts from which I derive many pleasant memories. The two elk remind me of my two favorite hunting partners, my great Uncle Art who taught me most of what I know about hunting and life, and my best friend Charlie who was the best part of growing up. The deer was proof that I'd learned the fine art of the stalk, a rite of passage. Colombo reminds me of the fragility of life, since I nearly tripped off a cliff in pursuit of him. All in all, they're suitable trophies as well as glorious reminders of my past—before I fell in love. However, to said wife they are "filthy, moth-eaten dead animal parts that have no place in a civilized society, let alone in my house!"

So, how about a compromise? After all, the house is half mine. I made the proposal that I decorate my half. Her reply: "Fine, you get the floor and the ceiling." This woman should be employed by the U.S. Government Office of Persian Gulf Negotiations.

It wasn't always this way. From our wedding day forward, my wife was always disturbed that she was married to a fisheries biologist who couldn't swim. She pressured me incessantly to take swimming lessons. One day about seven years ago, it dawned on me that, indeed, I held a bargaining chip. I am probably the only person in the state of Montana who learned how to swim at the tender age of 28 in exchange for antler-hanging rights. Unfortunately, it was not a signed agreement, and thus my lease has expired.

When we moved to Bozeman two years ago, a lot of the old wounds were reopened with the ceremonial stashing of the trophies in the garage. But you can't teach an old dog new tricks, and she hasn't softened her position. Last fall I rearranged the garage and in the process of moving my big elk rack, I decided I had had enough. I



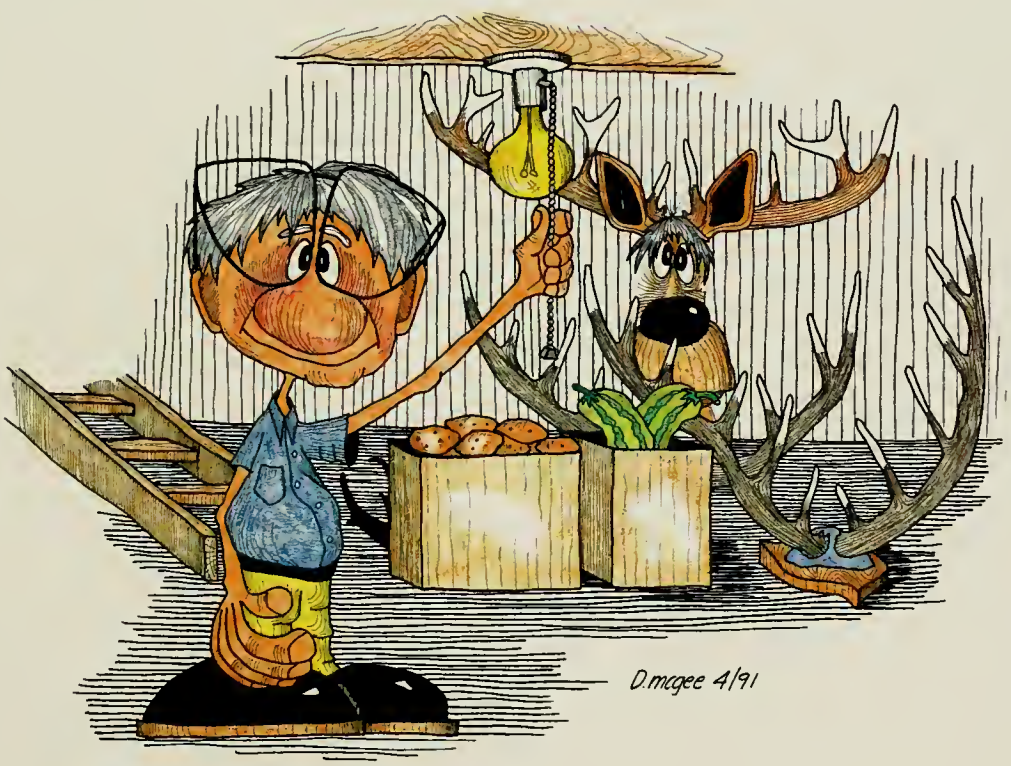


marched into the house with horns, hammer, and nails and announced my intentions in the face of an icy stare. Down to the basement I went and hung up my horns—they're mine, it's my house, and I hung 'em up!

Now, some might argue that a four-foot-high crawl space that doubles as a root cellar, with a dirt floor and a naked light bulb, is not an appropriate trophy room. However, every time I pull those boards off the door and crawl in there to pick out a squash or some potatoes for supper, I see the glint of an ivory-tipped brow tine shimmering in the light and a warm flush comes over me. Progress was made when I hung those antlers in the house.

I really feel the battle is not yet over. We now have two sons and if early signals are correct, they have inherited the hunter-gatherer bloodlines. Another 10 years or so and they'll be dragging home their own animal parts. I'm hoping that the maternal nesting instinct will overcome my wife's "hornophobia" and son Brian's first buck will hang proudly above the fireplace. That's when I'll make my move. I'll rise from my rocking chair, don my bifocals, and, flashlight in hand, I'll rescue that old six-point bull from the crawl space. I'll mount him on the wall where he belongs, for like Martin Luther King, I, too, "have a dream."

It really makes you suspect that God may be a woman. I believe She created women to outlive their men so they would have the opportunity to dispose of his trophies at the end. ■



Wildlife depends on places where traditions are more than memories.
Pass Them On.
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